

Thomson Triple Play

INTEGRATED SOLUTION FOR FAST TIME-TO-MARKET

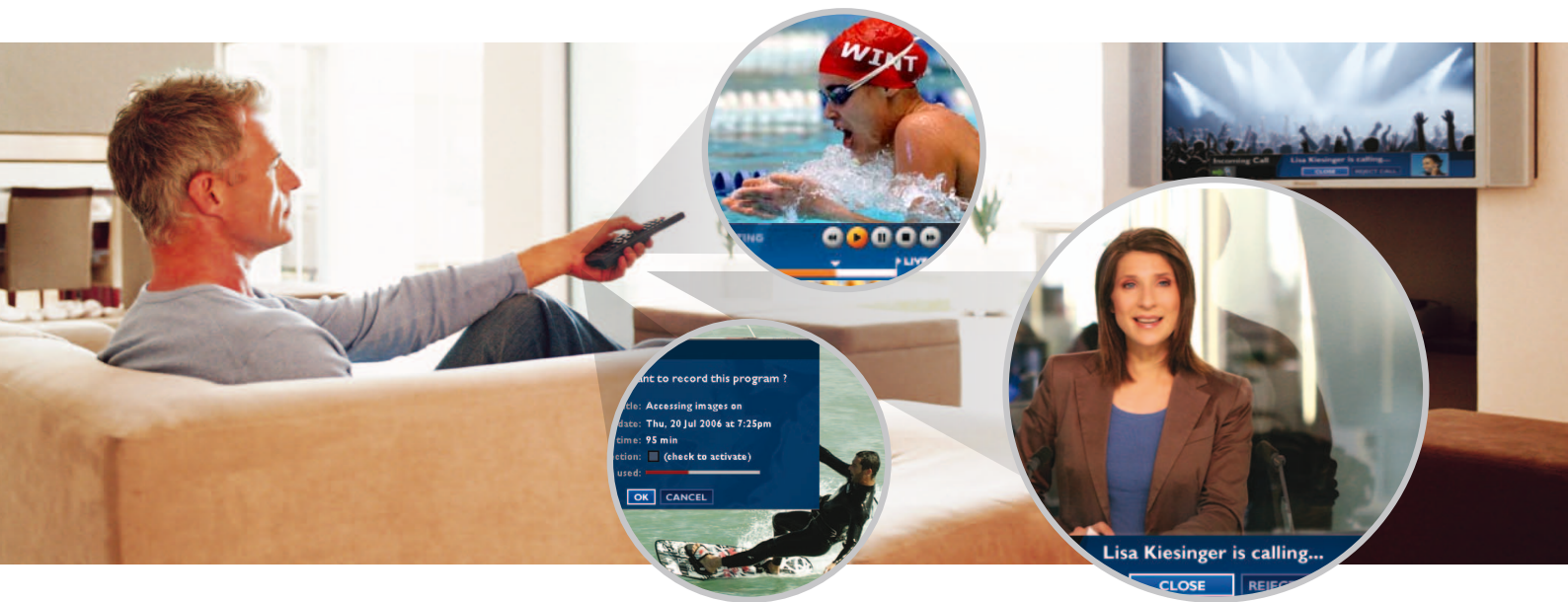
The Thomson triple-play solution is an end-to-end voice and video service-delivery environment for the quick and easy deployment of feature-rich broadband services, including primary-line telephony, interactive TV, and on-demand video content.



INTEGRATED TRIPLE-PLAY SOLUTION FOR

QUICK TIME-TO-MARKET

Leveraging its world-renowned expertise in all stages of the content-delivery chain, Thomson now offers an ideal infrastructure solution for telecom service providers to rapidly deploy innovative broadband telephony and TV services.



A Reliable End-to-End Solution

By developing all of the blocks of the value chain together, Thomson delivers perfect interoperability, unique feature sets, excellent scalability, high reliability, and superior price-performance value. Our video encoders and network equipment, SmartVision IPTV middleware, and Cirpack® VoIP switches—together with our state-of-the-art set-top boxes and home gateways—provide everything a broadband operator needs to deliver the ultimate in multiple-play services.

Large Array of Pre-Integrated Functions and Services

The Thomson triple-play solution goes beyond the standard delivery of voice, video, and data services. It offers a uniquely integrated user experience. Telephony is integrated into the TV portal to manage voice features, such

as musical ring-back tones or call forwards, with a user-friendly interface. Caller ID is shown on a TV, and live programs will automatically pause to let users answer calls. Voice and video mail, e-mail, and MMS can be easily accessed via the TV. Fixed-mobile convergence features can even be added to easily deliver voice and video services to subscribers on the move for a unique N-play solution.

Delivering Unique Features

Thomson pre-packaged solutions let operators safely deploy complex systems with pre-integrated services. By mastering all the key components of a triple-play system, we have created an end-to-end, standards-based solution. But our solutions also have advanced capabilities to optimize system performances. Our fast channel-changing feature, for example,

enhances a subscriber's satisfaction by cutting the time to switch between channels. And our automatic line-noise correction feature on set-top boxes lets operators extend the footprint of their IPTV networks by more than 20% without the risk of dropping packets from their VOD unicast streams.

Available Today

Telecom operators and Internet service providers wishing to offer a richer combination of broadband applications in order to fend off competition and increase revenue will find Thomson the ideal partner for rapidly deploying triple-play services. Today, quick time-to-market is key to a successful deployment and to the bottom line. Our end-to-end solution is available now for true service differentiation, increased customer stickiness, and new revenue generation.

THOMSON

VIDEO SERVICES DELIVERY PLATFORMS

The SmartVision service platform is our middleware solution for operators to manage and deliver live TV, VOD, and interactive services over IP networks.



State-of-the-Art Video Networking Equipment

Thomson video-compression, networking, and server products allow the delivery of high-quality content over low bit rates, enabling the introduction of HD services on networks with limited bandwidths. Whether it's moving information from studios to broadcast centers, or to a local headend, our encoders, streamers, and routers help telecom operators distribute video content securely using open architectures in both standard- and high-definition formats. Each component of this subsystem is compliant with the DVB-IP protocol, positioning Thomson as the first supplier with an end-to-end IPTV and triple-play solution compliant with open standards.

Comprehensive IPTV Solution

The Thomson SmartVision platform offers service providers and network operators a unique interface with which to manage and operate broadband video: to organize content and manage services, configure networks and subscribers, supervise platforms, analyze statistics, and other functions. It is designed to deliver any type of video content (live and delayed TV, VOD, and others) to any device (HDTV, PC, mobile phones, DVB-H portable players, and others) with superior scalability for profitable deployment at any size.

Mature & Flexible Platform

SmartVision is a mature and flexible solution that is at the heart of several of the largest broadband TV services. It is a feature-rich platform based on a pay-as-you-grow architecture that can be easily adapted to a wide range of

customer requirements, including new content formats (MPEG-2, MPEG-4), various content sources, growing numbers of subscribers, and new business models.

Rich Live TV Features

The SmartVision platform allows operators to create and manage TV channel bouquets and pay-per-view services. A subscriber can select a program or a page through an electronic program guide or through a mosaic. The platform also supports network PVR, network time shifting, and delayed TV features that provide subscribers with the most flexible ways of watching TV.

Video-On-Demand Services

The SmartVision platform enables a complete set of VOD features, including a catalog classified by genres, subscription VOD, VOD bundles, and TV-on-demand services.

All of the content is available in streaming mode, with the possibility for an operator to configure the maximum number of viewings and the content's availability time after purchase.

New Multimedia Services

The SmartVision solution can be integrated with third-party platforms to deliver interactive services, including weather forecasts, news, and games. Ultimately, TV viewers will be able to interact with programs, selecting different views, participating in game shows, voting, betting, or requesting more information from within a commercial.

THOMSON

VOICE SWITCHING AND CORE IMS PLATFORMS

The Thomson Cirpack voice-switching platform enables operators to offer primary-line telephony services over any broadband local loop.

Carrier-Grade Primary Line

Designed to replace the largest legacy local exchange switches, Thomson Cirpack switches allow telecom operators and Internet service providers to easily deploy primary-line telephony services on a large scale. The Cirpack platforms offer carrier-grade reliability as well as lawful intercept, emergency numbers, and local number portability for full compliance with regulatory requirements.

Field-Proven Voice Switches

Cirpack switches are at the heart of some of the largest European VoIP services. They have proven their superior scalability and reliability in delivering profitable primary-line telephony over broadband local loops.

For Small and Very Large Networks

The Cirpack platform can be configured as a pure softswitch architecture, enabling the quick time-to-market of feature-rich services to be delivered in small-, medium-, and large-scale deployments. The same Cirpack switch can then be enhanced with specific software modules, turning it into a true IMS/TISPA core platform that enables the easy delivery of multimedia services.

From TDM to NGN to IMS

In an IMS architecture, the Cirpack telephony application and the SmartVision IPTV middleware become application servers running on top of Thomson Cirpack CSCF and core IMS components. Our triple-play solution



is available now for massive deployments of profitable services and can easily migrate to comply with IMS standards when required.



Advanced Home Networking Solutions for Multiple-Play Services

Thomson is the worldwide leader in the market of broadband modems and home gateway solutions. Together with a full range of MPEG-2 and MPEG-4 and SD and HD set-top boxes, our residential gateways are the ideal customer-premises equipment for deploying advanced multiple-play solutions such as multiline DECT telephony, IPTV, PVR, fixed-mobile convergence, home networking, online music streaming, and automated picture uploading to a blog.

PROMOTING A UNIQUE EXPERIENCE FOR A

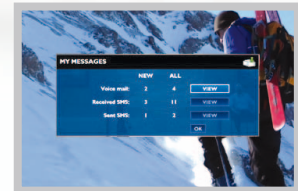
SUCCESSFUL SERVICE



Incoming-Call Pop Up

Primary-Line Telephony

Replicate the features, quality, and reliability of legacy telephone services using VoIP technologies over broadband networks. An existing analog line can be switched off without disrupting the voice service delivered to users. The Thomson solution scales to support massive deployments and is perfectly compatible with the PSTN networks, manages regulatory requirements, and enables major cost reductions compared to operating a legacy phone service.



Manage & Play Voice Mail



Network Time Shifting

Live Television

Thomson enhances the live TV experience drastically thanks to a series of innovations, including our fast channel-changing solution, which reduces channel-switching time by up to 75%, and our unique MPEG-4 compression chipset, which supports HD streams at low bit rates. Our solution also allows subscribers to watch live TV in unprecedented ways. For instance, they can pause, rewind, and review yesterday's programs thanks to our network PVR that mixes our headend and VOD server know-how.



Electronic Program Guide



Personal Video Recorder

Video-On-Demand

With various ways of accessing catalogs (VOD, VOD bundles, subscription to themes, etc.), Thomson makes selecting a video to rent easy. Subscribers can use all the classification possibilities—including genre, best sales, best reviews, and more—as well as advanced search functions. Pause and chaptering features, like those in DVDs, are also available. Videos can also be filtered for parental control.



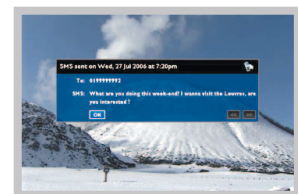
TV & Video-On-Demand



Settings Management

Telephony & Messaging Management

The Thomson solution includes pop-up windows on TV for incoming calls, automated do-not-disturb settings based on TV preferences, on-screen browsing of call histories with click-to-dial capabilities, and on-screen management of phone settings. For messaging, our features include a unified interface on TV for voice mail, SMS, e-mail, and, eventually, video mail or chat. Operators can also launch interactive services for an enhanced content-consumption experience, including SMS voting, interactive music channels, and more.



Send & Receive SMS


CALL LIST

6 0141443760
7 Tommler Fran.

1 Jennings K.

Tue, Jul 21 - 9:39 am

0141443803 (3)



Call back

Send SMS

Delete

FIXED-MOBILE VOICE AND VIDEO

The Thomson triple-play solution is designed to help telecom service providers differentiate themselves from the competition by promoting unique broadband services that bundle fixed and mobile telephony with fixed and mobile TV, all on a single integrated infrastructure.

Thomson Cirpack voice switches connect the VoIP and GSM service logics together to enable converged features such as dual ringing of fixed

and mobile phones on incoming calls, unified voice mail, and unique caller ID on both devices. They also manage VoIP roaming for subscribers to access their fixed-line services while away from their home or office environment, such as via a WiFi/GSM phone or a softphone on a laptop.

Thomson SmartVision middleware provides mobile TV on both 3G and DVB-H networks for service continuity when on the move. Subscribers can initiate

live TV recording from their mobile phones, start watching a live program on their TV, pause it and resume watching it on their mobile device, and access the same VOD catalog on both their IP and mobile TV receivers.

MAKING IT PROFITABLE

The Thomson triple-play solution is designed to help telecom service providers build viable business models. Because providers invest the most in their networks, our solution targets reducing the IP core network upgrade costs and maximizing the capabilities of the existing access network.

Added together, this approach can double an IPTV operator's return on its assets. Thomson headends, VOD servers, service platforms, and set-top boxes—as well as its network design and topology—are optimized to push content closer to the edge with lower bit rates and additional protection and robustness, so an operator can reliably increase its reach and footprint and reduce the traffic on its core network.

IP set-top boxes, for example, are a key element in this optimization. Thomson set-top boxes are able to correct data, ask for a packet to be resent, buffer or store heavy data, acquire content via other networks, and communicate with other devices.

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