

IPTV VOD DVB PAYTV SMS CAS CATV

EPG NVOD SVOD PUSHVOD LIVE TV

NPVR DRM HYBRID DVB/IP HDTV SDTV

ITV PVR ON-DEMAND TIMESHIFT

CATCH UP START OVER IPTV VOD DVB

PAYTV SMS CAS CATV EPG NVOD

SVOD PUSHVOD LIVE TV NPVR DRM

ORTIKON ACE[®] IPTV MIDDLEWARE

HYBRID DVB/IP HDTV SDTV ITV PVR

ON-DEMAND TIMESHIFT CATCH UP

START OVER IPTV VOD DVB PAYTV

ORTIKON
interactive

PAYTV SMS CAS CATV EPG NPVR DRM

ORTIKON ACE® IPTV MIDDLEWARE



Ortikon Interactive - Delivering the ITV technology your customers prefer

By your expertise you know the thriving content comes first. Some of your customers want to rush directly to their favourites. Some are likely to hang around and seek for new entertainment or unforeseen surprises you have for them.

But there is more than that. Every viewer desires an easy and fast access to whatever service they choose. And to capture those who for the very first time come across to your services, the entrance must be a sight for their eyes and inviting enough to make them sit back and yield themselves to your offerings tonight. And again tomorrow... With our superior technology and your content you will capture their attention!

Wanna go interactive?

ORTIKON ACE® is your access to both broadband and broadcast

To bring new services in live or on demand, Ortikon designed the ORTIKON ACE® IPTV Middleware for operators and broadcasters. With it you can easily and securely create best selling interactive and on-demand services, promotions and campaigns both in broadband and broadcast networks. Also the management of your value-added services is easy because of our ideally designed tools.

With advantageous services you bring value to your customers, increase their loyalty and reduce churn. With such services you also differentiate from your competitors and build grounds for new revenue streams.

ORTIKON ACE® service management solution allows you to operate in digital (DVB), broadband (IPTV) and mobile television (DVB-H).



Complete end-to-end iTV solution

Ortikon Interactive - Meeting your unique requirements

- Content creation
- Interactive service and application management platform
- Value-added services and applications
- On-demand content management system
- Head-end management tools
- iTV service and application development
- Technical consultation
- System integration

Fast-to-market

Quick entry to market is valuable when you generate new business or enhance existing ones with new services. In the future you appreciate it even more, as customer demand can vary fast. Also scaling up the services that sell or extending your business to new areas comes out rapidly. What about scaling up the services that sell or extending your business to other areas? Our technology enables you to do that.

Fulfilling your services

Our products can be integrated with your existing infrastructure, e.g. subscriber management and billing systems. The content remains secure against piracy. And your customers can rely on the services to work smoothly and rapidly. With ORTIKON ACE® the layout of the interface and the services can be fully tailored to make your own brand visible all the way.

Services

Modularity of ORTIKON ACE® brings many benefits, e.g. fast implementation, several choices for you to compose your service kit and easy scalability as your business grows.

The system allows you to create several different sets of contents and deliver them to remote sites. The services and their appearance are totally tailored, yet the management is easily handled in the central site.

ACE® TV

- Logical main menu system
- Channel zapping functions
- Television channel list
- Audio/language selection
- Subtitle selection
- Aspect ratio selection
- Other TV related functions



+ Settings module

- Favourite language settings
- Favourite subtitle settings
- Favourite aspect ratio settings
- Favourite channel list creation
- System information
- Optional user interface skin change
- Optional parental control functions

+ Radio module

- Radio channel list
- Radio portal
- Comprehensive radio channel selection functions

ACE® EPG

- Enhanced EPG functions
- Channel, genre and date views
- Television-currently -view
- Seven-day-schedule -view
- Full program descriptions support
- Search functions
- Optional promotional offers



+ PVR module

- Program recording functions
- Logical folder for own recordings

+ NPVR module

- Program recording functions
- Logical folder for central recordings

+ PPV module

- Program payment functions
- Integrated to CRM and CAS

+ NVOD module

- Adds NVOD titles to EPG
- Automatic linking to NVOD service

ACE® NVoD

- Near video-on-demand service
- Enhanced EPG
- Dynamic genres and categories
- Enhanced search capabilities
- Trailer channel support
- Language & subtitle selection
- Coupled with On-Demand Manager



ACE® Pay-TV

- Channel packet ordering service
- Easy-to-use user interface
- Fully automatic ordering process
- Evaluation offers support
- Promotional offers support
- À-la-carte model support
- Integration to operators CRM & CAS



ORTIKON ACE® Middleware

ORTIKON ACE® Services

ORTIKON ACE® Management

ACE® VoD

- Complete on-demand user interface
- Dynamic genres and categories
- Multiple content brand support
- Enhanced search capabilities
- Trailer viewing support
- Full trick-play video controls
- Coupled with On-Demand Manager



ACE® Mail

- Complete television mail system
- Internal address book
- Multiple mail account support
- IMAP4 mail server support
- Easy-to-use user interface
- Optional image archive
- Optional SMS and MMS support



ACE® News

- News portal service
- Automatic content aggregation
- Advanced RSS feed support
- Text, pictures and linking support
- Full feed configuration capabilities
- Dynamic news category support
- Extended character set support



+ Time Shift module

- Comprehensive time shift UI
- Start-over support
- Program re-start from beginning
- Program fetch from network PVR
- Pause Live-TV
- Linkage to EPG
- Catch-up support



ACE® PushVoD

- VOD content download from broadcast
- PushVOD content management in STB
- Enhanced user interface
- PushVOD application resident in STB
- Support for hybrid DVB+IP



ACE® Zone

- Games-on-demand portal
- Easy-to-use user interface
- Games from leading game studios
- Remote control+game-pad support
- Game specific high-score tables
- Multi-player games support
- Integrated to game servers



Management

Middleware links all the back-office systems together. It contains management systems for TV and EPG, on-demand, and games plus interfaces to conditional access and CRM systems. For your customers it provides user interface and delivers the services.

ORTIKON ACE® Middleware

ORTIKON ACE® Services

ORTIKON ACE® Management

ACE® IPTV Manager

- TV channel management
- Automatic redundancy switching
- SNMP support
- Logical web-based user interface
- STB management
- User account management
- Load-balancing management



ACE® EPG Manager

- Sophisticated EPG aggregator
- Advanced EPG metadata import
- Extended file importing support
- Easy description adding and editing
- Multiple language support
- Extended character set support
- DVB content identifier support



ACE® On-Demand Manager

- Complete metadata management
- On-Demand asset management
- On-Demand network management
- Dynamic genre & price management
- Promotions and campaigns support
- Multiple language support
- Extensive usage log creation



ACE® Menu Manager

- Main menu management system
- Add and remove entries from menu
- Logical web-based user interface
- Template support
- Skin support



ACE® Parental Control Manager

- Pin-code authentication method
- Dynamic content level management
- Automatic channel hiding
- Automatic menu entry hiding
- Automatic EPG information hiding
- Automatic VOD genre blocking
- Automatic VOD title blocking



ACE® NVOD Manager

- Complete NVOD channel list editor
- Graphical title playlist manager
- Dynamic access criteria control
- EPG information filtering
- RTSP streaming server control



Technical specifications

Parameter	Specification	Note
Content		
Markup Language	HTML 4.01, XHTML 1.0, XML 1.0	
Cascading Style Sheets	CSS1, CSS2, CSS3 (partly)	
Document Object Model	DOM1, DOM2, DOM3 (partly)	
Pictures	GIF, JPG, PNG and Animated GIF	
Javascript	JavaScript 1.5, JavaScript extensions for enhanced TV	
Streaming video	MPEG-2, MPEG-4 (H.264) and VC-1	
Audio	MPEG (Layer 1,2,3), PCM, AC3	
Rich Media	Macromedia Flash	Optional
TV formats	4:3 and 16:9 formats	PAL-B, NTSC-M

Supported set-top boxes

Motorola / Kreatel	1500, 1700 and 1900 series	Implemented
Amino	AmiNET 1x0	Being implemented
Other manufacturers	Motorola, SA, Thomson, etc.	On request

Subscriber authentication & management

Authentication	IP and MAC address, Unique serial number, CA card, pin-code, passwords	
Subscriber management systems	Dataprism Vision or any other subscriber management system	
Supported protocols	XML-RPC, RADIUS, LDAP, SOAP	
Conditional Access Systems	Conax or any other CAS system	
Digital Rights Management	Conax or any other DRM system	

Electronic Program Guide

Incoming EIT handling capacity	200 multiplexes	1000 channels
Program information source	PSI/SI, XML, XLS and text files	EIT p/f and schedule, BAT tables
Video	no video, 1/4 screen and 1/16 screen	
Program search	date, genre, channel, search words	
Channel change inside the guide	Supported	

Management and monitoring

SNMP	v1/v2c, MIB-II, Host Resources MIB, traps	
Statistics	users, channel viewing, service usage, server load	
Remote access	telnet, ssh	
Self diagnostics	Automatic HW diagnostic when device is restarted	
Alerting	Alert Standard Format 2.0	

Network

Addressing	IPv4	IPv6 ready
Protocols	TCP, UDP, RTSP, IGMP, ICMP, HTTP	
Connection implementation	SSL (ver. 3.0, 64 and 128 bits), VPN, Simulcrypt, PKI, Macrovision 7.01	

Servers

Server-side implementation	Java 2 Enterprise Edition	
Client-side implementation	Ajax (Asynchronous Javascript and XML)	
Additional software	Jboss 4 and MySQL 5	
Operation system	Red Hat Enterprise / CentOS Linux	
Hardware	IBM eServer xSeries 3550 or 3650	1+1 Backup possibility
Form	Rack 1U or 2U / 28" deep	Up to 42 units per standard 19" rack
Processor	1/2 x Dual Core Intel Xeon	1333 MHz front-side bus
Memory	1GB-8GB	PC5300 DDR2-667
Expansion slots	2 x PCI Express	
Disk Storage	300GB Serial Attached SCSI	Up to 6 hot-swap SAS disks
Power supply	Up to 2 redundant hot-swap	AC
Network	Dual Gigabit Ethernet	
RAID support	ServeRAID	RAID -1, -5 optionally
Warranty	1-year or 3-year onsite limited warranty	

Advantages

ORTIKON ACE®: for you to get maximum benefit from interactive television right away and long time in the future

Integration

The standard J2EE platform and the extensive application programming interfaces (APIs) allow integration of the system to your existing infrastructure.

Fully scalable

The system is designed with full broadcasting QoS in mind so that it is scalable up to thousands remote nodes serving millions of users responsively and promptly.

Third party content

The system is fully open for importing existing web or mobile services or creating new content with standard web authoring tools.

Design customization

The system allows tailoring of the services to match operators' own brands, offering different designs for distinct user segments or using various service brands in selected regions.

Wide choice of STBs

The services can be ported to any supplier's low cost IP set-top boxes with basic/necessary features but surely a enhanced of features will make services even better.

Ready for hybrid, IP and DVB (cable, terrestrial, satellite)

The system can be used both in IP and DVB networks, incorporating the best from both of the platforms, i.e. efficient distribution of basic services with DVB with unique on-demand and interactive personal services with IP.

Fast time-to-market

The system is ready to be deployed right away.

Future proven technology

To ensure our solution's superiority for our customers' business also in the future we are continuously developing new services and features.

Ortikon Interactive

We help you to build up sustainable iTV business that succeeds

Ortikon designs and develops open standards based digital television technology to help operators, broadcasters and content developers to create easily attractive iTV services.

Our pioneering work within interactive and on-demand television deployments coupled with years of research have made us one of the leading interactive television technology companies in the world. We work closely with the best technology partners to deploy complete and reliable turn-key systems for our customers.

Our strategy is to find the best possible long-term solution for every single customer. That's why leading European operators have exploited our solutions creating commercially successful business since 2000. And more, we have achieved one of the highest client satisfaction ratios in the industry.

Ortikon Interactive is based in Tampere, Finland.

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interactive

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