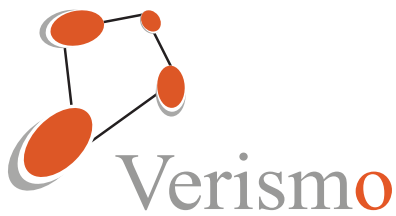


Broadband TV Solution

Cloud services for global entertainment



www.verismonetworks.com



Broadband TV Solution Overview

Verismo Networks' award winning Broadband TV Solutions enable a service provider or content aggregator to seamlessly integrate Live TV channels, Video-On-Demand (VOD) content along with Over-The-Top (OTT) Internet content and Personal Media, deliver an unparalleled subscriber viewing experience and quickly expand footprint.

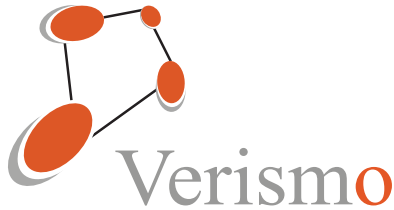
Verismo's Cloud based Managed Services & Client Architecture is a proven open platform, used by Global Managed Service Operators to innovate, differentiate, and provision compelling value-added Broadband Entertainment services in over 120 countries around the world.



The Verismo Advantage

FASTER TIME TO MARKET	HIGH QUALITY EXPERIENCE	CUSTOMIZATION & CONTROL
<p>One-stop cost-effective solution that speeds up deployment.</p> <p>Modular Cloud Services architecture that can be paired with existing set-up.</p> <p>Scalable with servers worldwide and 24/7 Network Operations Center.</p>	<p>Delivers up to 1080p HD with support for advanced codecs and multiple client platforms.</p> <p>Efficient use of bandwidth with Adaptive Streaming, Multicast support.</p> <p>Secure delivery with DRM/encryption options.</p>	<p>Middleware admin portal for service provisioning, monitoring and optimization.</p> <p>Branded private label service option</p> <p>Value-added monetization from DVR, Advertising, etc.</p>

*For more information, please contact: Tel: +1 (408) 598-3661
 Web: www.verismonetworks.com Email: info@verismonetworks.com*



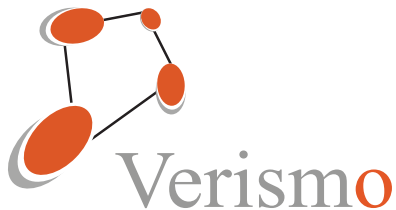
Broadband TV Solution Cloud Services

Verismo's Cloud based Managed Services is a multi-service delivery platform to bring content to multiple client platforms such as TV or set-top box, Tablet or Smartphone for a "TV Anywhere" experience. Service operators can choose from Standard, Advanced or Premium packages with the right Middleware tools and services that fit their content, client device & business management needs, and upgrade as necessary. The service operator has full access and control through a web portal to create, monitor and optimize the services.

<i>Verismo Cloud Based Managed Services</i>			
Features & Packages*	Standard	Advanced	Premium
DEVICE & USER MANAGEMENT <ul style="list-style-type: none"> Client provisioning, activation/deactivation, messaging User profile registration and client-ID mapping with user account Remote firmware & UI upgrade, diagnostics, uploading log files 	✓	✓	✓
CHANNEL & CONTENT MANAGEMENT <ul style="list-style-type: none"> Uploading content metadata into Indexing Server Data Base. Creating & editing Live, VoD channels with bulk edit support. Multiple POPs in US/Europe/Asia and CDN support across the world 	✓	✓	✓
SUBSCRIPTION & BILLING <ul style="list-style-type: none"> Map channels & content to subscription packages Create & manage subscriptions, pay-per-view, pricing & bundling Billing and payment processing. 	✓	✓	✓
USER INTERFACE MANAGEMENT <ul style="list-style-type: none"> Create and edit UI to customize and brand service (logos, images, icons, color, EPG, etc.) 	✓	✓	✓
ANALYTICS <ul style="list-style-type: none"> Aggregate reports on URL activity, active boxes by geography Server load balancing, tracking service outages 	✓	✓	✓
NETWORK MONITORING <ul style="list-style-type: none"> Monitor service operation round the clock Setting up bulk or individual box upgrades 	✓	✓	✓
PERSONALIZATION & SHARING PORTAL <ul style="list-style-type: none"> Content personalization and sharing ("VuMarks") service 		✓	✓
NOC SUPPORT <ul style="list-style-type: none"> 24/7 customer support Network Operation Center (NOC) 		✓	✓
SECURITY <ul style="list-style-type: none"> DRM, URL encryption 		✓	✓
GEO TARGETING <ul style="list-style-type: none"> Geo-tagging and Geo-filtering 		✓	✓
BANDWIDTH MANAGEMENT <ul style="list-style-type: none"> Adaptive Streaming (HLS) 		✓	✓
ADVANCED PAYMENT OPTIONS <ul style="list-style-type: none"> Interface to third party payment gateways Scratch card based payments 		✓	✓
DVR <ul style="list-style-type: none"> Local DVR enabling for "TV Anytime" service (subscriber requires DVR Kit) 			✓
ADVERTISING <ul style="list-style-type: none"> ASX playlist based advertising (Pre-roll or Post-roll) 			✓
MULTI-SCREEN CLIENT PLATFORMS <ul style="list-style-type: none"> XML based API to deliver content to non-Verismo devices including third party set-top boxes, tablets and other client platforms Specific client apps available upon request 			✓

*Features, packages & pricing subject to change. Please contact Verismo Networks sales representative for latest.

For more information, please contact: Tel: +1 (408) 598-3661
Web: www.verismonetworks.com Email: info@verismonetworks.com



Broadband TV Solution Client IP Set-top Box

Verismo's Broadband TV solution includes the Client IP Set-top Box (STB) that delivers a high quality HD viewing experience for live, on-demand or recorded content. It has a compact appealing design, and delivers content efficiently and securely from different sources.

High Quality Content

1080p HD Multi-format Media Player
Live IPTV, Video-on-demand or OTT
Personal Media playback (DLNA server, USB, or Shared drive)
HTML5 browser based apps/content

TV Friendly User Interface

Quick & easy navigation
QWERTY remote option for easy typing.
Customizable UI with both EPG & non-EPG modes

Security & Bandwidth Efficiency

Adaptive Streaming (HLS)
Unicast and Multicast (IGMP v2/3)
DRM & encryption

Time Shifted Viewing

DVR option with external USB drive
Typical features like trick modes, entire season scheduling and more



Specifications

HARDWARE PLATFORM	Sigma 8652 platform, 512MB RAM
INPUT / OUTPUT	Ethernet 10/100 Base-T ; Optional 802.11n Wi-Fi with WEP/WPA/WPA2/WPS, 3G/4G dongle 3x USB 2.0 ports HDMI with HDCP output Analog RCA video and stereo audio output; S/PDIF Optical output
VIDEO RESOLUTION	480i/p, 576i/p, 720p, 1080p/1080i @ 30fps; NTSC/PAL (4:3, 16:9). Optional Macrovision support
VIDEO CODECS & CONTAINERS	Containers: AVI, Xvid, MOV, MP4, MPEG 2 PS & TS, FLV, Matroska, ASF, M4V, VOB, M2TS/MTS, TRP, TP/TS, DVR-MS, M4A (audio only), MP4A (audio only), WMV, .mkv, .ifo Video Codecs: MPEG1/2/4, H.264, Microsoft MPEG4, WMV9, VC1. Audio Codecs: MP1/2/3 (2.0), MP2.5, WMA9 2.0, AAC, LC 5.1, AAC HE 5.1 (aacPlus), WMAPro 5.1, ATRAC3 2.0, MPEG4 BSAC 2.0, WAV/LPCM/PCM, Ogg Vorbis. Optional Dolby Digital 5.1 (AC3), DTS, DIVX 3.x/4.x/5. Image: JPEG, GIF, BMP, PNG, TIFF Playlists: PLS, M3U, WPL; Subtitles: SRT, ASS, SSA, SMI DRM: Windows DRM, Verimatrix Apple Adaptive Streaming (HLS): with 128-bit decryption.
POWER/LEDS & INFRARED	110-220v Power Supply (Internal 12V DC, 2A) Front panel LED indicator for Power & Internet connection Infra-Red (IR) Receiver (for remote)
SIZE & WEIGHT STANDARD KIT	3.5" x 4.0" x 0.8", 5.5 ounces (excluding accessories or packages) 17-button remote, HDMI Cable, Easy Setup Guide. Optional: Wi-Fi or 3G/4G USB dongle & USB extender cable, QWERTY or DVR Kit (DVR Remote & USB drive)

For more information, please contact: Tel: +1 (408) 598-3661
Web: www.verismonetworks.com Email: info@verismonetworks.com