

CABLENET 2014

A technology showcase reputed to have the latest in innovative companies as participants. It appears annually as a highlight of the cable industry's national show to feature the latest in broadband content and services. CableNET is an industry pavilion within the main show floor of The Cable Show.

Co-Sponsored by





CableLabs[®]

A non-profit research and development consortium dedicated to creating innovative ideas that significantly impact our cable operator members' business. CableLabs also serves to define interoperable solutions among our members and their technology suppliers in order to drive scale, reduce costs, and create competition in the supply chain. CableLabs membership is comprised of the major cable operators worldwide. www.cablelabs.com



ACCESS Systems Americas 1188 E Arques Ave Sunnyvale, CA 94085

For more information visit www.access-company.com

ACCESS Solution for DLNA Commercial Video Profile-2 (CVP-2) guidelines and multiscreen media sharing for both home-network and cloud-based video delivery

- NetFront Browser NX integration: the demonstrations will include integrations with world leading chipsets for STB and TVs as well as MSO guides. NX is Webkit based offering industry leading HTML5 performance with low memory requirements
- NetFront Living Connect integration: a multiscreen solution that provides the content and CE industries with the simplest and most powerful route to enable consumers to watch, listen, and share movies, music and TV programs inside and outside the home. The solution is a DLNA Technology Component supporting the latest CVP-2 Guidelines and is integrated with leading security solutions, making it a key enabler for business models based-on distributing paid and free content to STBs, TVs, tablets, mobile phones and incar entertainment and navigation systems.
- CDN integration: support for cloud based content sharing, including HTML5, has been integrated to offer a seamless unified TV experience through the cloud.



ActiveVideo 333 W San Carlos St, Ste 200 San Jose, CA 95110

For more information visit www.activevideo.com

Cloud-Based Video Mosaic: Transforming the Navigation Paradigm

The proliferation of linear channels and online and On Demand video, coupled with huge improvements in video quality (Ultra HD / 4K), have put pressure on pay-TV providers to deliver higher-resolution, video-rich experiences that can differentiate services and provide better navigation for rapid access to an infinite array of content.

However, hardware and software limitations of existing STBs and connected devices and the capital and operational expenses and time-to-market needed to deploy next-gen STBs at scale have slowed service velocity and the pace of innovation for pay-TV providers.

At CableNET, ActiveVideo® will demonstrate how its CloudTV™ software platform can transform the user experience by delivering VidGrid™, a personalized video mosaic that can simultaneously stream upwards of hundreds of tiles of live video. This core technology that allows for cloud-based delivery of video mosaics has already been adopted by a Tier 1 cable operator and is transforming TV content discovery and navigation paradigms.

The ActiveVideo demonstration will show how CloudTV renders the UI in the cloud—decoupling the user experience from device dependencies. CloudTV allows a single-tuner, low memory device to support a video-rich user interface and navigation that would ordinarily require multiple tuners and a CPU- and memory-intensive device. The video-rich interface allows consumers to discover, preview and select linear, online or on-demand channels by viewing live video feeds and trailers, instead of viewing traditional program selections based on text or static images.



Alarm.com 8150 Leesburg Pike, Ste 1400 Vienna, VA 22182

For more information visit www.alarm.com

Advanced Home Security and Automation

Alarm.com is a technology company that develops a leading platform to connect and empower the internet of things. With a broad range of businesses and solutions, Alarm.com offers best in class cloud services, mobile applications and intelligent automation technology. Millions of people use Alarm.com to connect and manage the things that matter most.



Amdocs 1390 Timberlake Manor Pkwy Chesterfield, MO 63017

For more information visit www.amdocs.com

Wi-Fi Experience Solution

As the mass adoption of Wi-Fi-enabled devices converges with the acceptance of Wi-Fi as a global wireless standard, the business model for Wi-Fi is shifting—from retention and offload to a tool for service differentiation. It is projected that half of the Internet traffic will traverse Wi-Fi by 2016. MSOs can move away from revenue-neutral Wi-Fi approaches by defining a new class of Wi-Fi services that deliver innovative premium Wi-Fi services. The Amdocs Wi-Fi Experience Solution will demonstrate readily monetizable use-cases which integrate Wi-Fi access network with real-time standards-based policy, AAA and a portal integration framework. Live demonstrations will include premium Wi-Fi (QoS-based), shared-wallet Wi-Fi, and affiliate casual data access.

=ateme

ATEME 3400 Coral Wy, Ste 303 Miami, FL 33145

For more information visit www.ateme.com

Titan Any to Any Transcoding

Titan File Transcoding for file based workflows and Titan live Transcoding for distribution in Broadcast and OTT. Featuring Titan SDI Cable Headend in a box along with the best in quality HEVC / MPEG-4 / MPEG-2 live encoding and file transcoding up to 4K resolution.

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CableLabs 858 Coal Creek Cir Louisville, CO 80027

For more information visit www.cablelabs.com

Community Wi-Fi QoS

This is a demo of a Quality of Service (QoS) solution on the Wi-Fi air interface designed to allow MSOs to better control the user experience of their Community Wi-Fi deployments. Community Wi-Fi networks allow operators to leverage unused capacity on existing residential (and SMB) Wi-Fi infrastructure to offer Wi-Fi network access to their on-the-go subscribers. The residential subscribers accessing the network from inside their homes have prioritized access to the Wi-Fi and backhaul resources. Roaming and on-the-go subscribers are only allowed to use the Wi-Fi network capacity that is not currently used by the subscriber at home. The challenge of traffic management and prioritization on public and private SSID is fundamental to offering community Wi-Fi services. This becomes even more challenging to operators that use a single residential gateway and Wi-Fi radio to enable both public and private SSID. CableLabs has come up with a potential solution to this problem. CableLabs would like to provide a demo at Winter Conference to raise awareness for this proposed solution, spur conversations with vendors about their alternative solutions, and raise awareness among MSOs about the potential user experience degradation that can occur from deploying equipment that does not have a capable QoS solution. The demo will be used to show the impact on residential customer service as a result of the traffic on public SSID. The demo will also show the improvements as a result of our proposed solution.

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For more information visit www.cablelabs.com

DLNA CVP-2

Demonstration of CableLabs' open source DLNA CVP-2 server reference implementation and Cox's G8 production set-top boxes serving Cox's HTML5 RUI ContourWeb guide and video streams to DLNA CVP-2 clients from various third party commercial vendors demonstrating their CVP-2 client demos in the CableNET area. The demo will showcase several features of recently published CLNA CVP-2 Guidelines including MSO HTML5 navigation, video playback with trick modes, and authentication.

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For more information visit www.cablelabs.com

EIDR Social Media

CableLabs will be demonstrating the benefits to the industry of using a universal content identifier (EIDR). The demonstration shows how social networking between multiple video distributors on diverse platforms can be accomplished with little or no explicit cooperation. Although there are other industry initiatives around social media, EIDR is uniquely positioned to provide maximum inclusivity and promote reach among providers.

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For more information visit www.cablelabs.com

Internet of Things: Light House

Whether the proper term is Internet of Things, Connected World, or Internet of Everything, it's really all about improving the quality of life of our customers by enabling all your devices to work together. The Light House demonstration "illuminates" the opportunities for these diverse ecosystems to coexist and operate harmoniously We demonstrate this through the control of a variety of "smart" light fixtures using technologies such as Zigbee, DLNA and Allseen from a standard remote control and an EBIF application on a set-top-box.

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For more information visit www.cablelabs.com

Internet of Things: MyChauffeur

As consumers strive to live more green, Smart City applications that provide real-time mass transit information reduce traffic congestion, air pollution and commute times. The MyChauffeur application uses real-time bus location information to schedule email or text alerts to commuters precisely when they should begin making their way to catch their bus or train on their individual routes. In this demonstration we use live information for Los Angeles.

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For more information visit www.cablelabs.com

Internet of Things: QuakeAlert

The Earthquake Warning application is a Smart City application that alerts subscribers to any seismic events above a minimum threshold and near their current location. It uses public data feeds from state and local governments. While our application has not been successful in preventing earthquakes, the text or phone messages it sends might provide enough warning to allow people to protect themselves.

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For more information visit www.cablelabs.com

Wi-Fi Spectrum Showcase

CableLabs will be demonstrating the innovation that can be unleashed through wireless spectrum. Less than a month ago, the FCC expanded Wi-Fi access to spectrum in the 5 gigahertz band, which is the global home for next-gen Wi-Fi known as 802.11ac, or "gigabit Wi-Fi". This new spectrum will help to realize the potential of this blazing fast wireless broadband technology. Using this new bandwidth in conjunction with 5 gigahertz frequencies available today, CableLabs will be showing the step-up in speed to 1 Gbps and higher. This incredibly fast throughput will enable untold innovations and provide real benefits to wireless broadband users and the economy broadly.



Celeno 76 Zarhin St Ra'anana, 43665, Israel

For more information visit www.celeno.com

Celeno's Breakthrough Airtime Management Suite

Our demonstration showcases Celeno's unique patent pending Airtime Management technology. This breakthrough technology enables the provisioning, enforcement and dynamic allocation of Wi-Fi airtime capacity to different virtual networks and even different clients all served by the same Wi-Fi Access Point. The result is an improved user experience with a smarter distribution of Wi-Fi capacity between user devices. Specifically the demonstration will show Celeno's Airtime Management technology in action, dynamically changing the airtime between multiple logical networks and multiple devices within each network.

ELEMENTAL ©

Elemental 225 SW Broadway, Ste 600 Portland, OR 97205

For more information visit **elementaltechnologies.com**

Software-Defined Video Processing

At CableNET, Elemental will demonstrate advanced video processing applications that enable delivery of premium content to multiscreen devices. The company will highlight the capabilities of its software-based platform, including real-time HEVC encoding in the cloud with live streaming of content in the MPEG-DASH format to mobile devices. Elemental will also showcase its ability to support file-based 4Kp60 Ultra HD video delivery and stream live HLS outputs from the cloud to Apple devices.



Envivio, Inc. 400 Oyster Point Blvd Ste 325 South San Francisco CA 94080

For more information visit www.envivio.com

Advance Video Processing for 4K and the Cloud

Cloud

Making content available on any screen has almost been like jumping through hoops for cable operators. Operators have to develop their own apps, verify that they work with all formats and resolutions, secure the content with the latest DRM schemes, automate targeted ad inserts, manage compatibility issues and finally process the content for delivery to any device.

That is why a growing number of operators are interested in using end-to-end video services in the cloud. But, many are still uncertain as to how to source this type of service, and unsure if they can trust their valuable services to "the cloud."

Envivio will demonstrate the workflow of an end-to-end cloud approach for delivering any live linear channel or on-demand content to multiple screens. We will demonstrate how an MSO can easily get a multiscreen service up and running in a few days, by using the cloud to securely perform encoding, packaging, DRM, targeted ad insertion, multi-CDN delivery, app generation and more.

4K HEVC

HEVC is the driver behind bringing 4K Ultra HD (UHD) content to the living room through traditional broadcast or OTT services. 4K has four times the amount of pixels as high-definition (HD) 1080p resolution which, in turn, requires more bandwidth. HEVC, which is projected to cut the bitrate in half, will enable the delivery of 4K content to end users. There are many benefits in store for operators with the implementation of HEVC to deliver higher resolutions but also pitfalls that can be avoided with the right strategy.

This demo will showcase Envivio's latest 4K60p video compression in HEVC format, output on a 65" TV set.



Espial 200 Elgin Ottawa, Ontario K2P 115 Canada

For more information visit www.espial.com

Fast HTML5 UX: TV Reimagined With RDK

Espial will showcase its latest high performance demos featuring a fast and elegant TV user experience based on HTML5 and RDK. The demo will present sneak previews of upcoming Espial products including the Espial G4 STB Client and Espial G4 UX. Visitors to the Espial demo will see our super fast video apps — including guide, video-on-demand, what's on — shown on multiple RDK-based set-top box platforms. It will also feature several UX portals, custom sports apps as well as seamless access to favourite HTML5 web apps such as YouTube. As a strong proponent of open standards, Espial has established a leadership position delivering an advanced RDK and HTML5 user experience. Espial's products provide MSOs with a UX platform that allows them to rapidly innovate, port and deliver services on the target RDK-based STBs of their choice.



Esri 380 New York St Redlands, CA 92373

For more information visit www.esri.com

Improving Network Reliability with GIS Location Analytics

To meet customers growing expectations for service assurance, MSOs need to improve network reliability. This requires systems that can collect and quickly analyze the performance of the network. Esri will demonstrate how the ArcGIS platform with its geospatial analysis tools can display network performance through a dashboard display so the entire organization including executives, operations managers and technicians can identify and respond to network issues before they become service affecting. The ability to accurately assess the status of the network through visualization and identify specific problem areas by location helps prioritize areas where capital investments will improve service delivery and customer satisfaction. This leads to lower churn and higher revenue.

INVISION INC.

INVISION Inc. 28 W 44th St, Ste 609 New York, NY 10036

For more information visit www.invisioninc.com

DealMaker Multi-Platform Campaign Management System

The Most Robust System in the Marketplace for Advertising Media Sales. Supports multiple networks, divisions and multiple platforms: Cable, Broadcast, Satellite and Syndication.

Key features include:

- Rich strategic operational and ad hoc reporting
- Real time inventory integrated with sales
- Robust integrated auditing
- ▶ Unlimited sales methods packages, clusters and single network sales.

The Solution for Video, Digital and Addressable TV Advertising.

- Effectively and efficiently manage video, digital and advanced TV advertising campaigns
- Flexible workflow engine which allows clients to customize workflow rules and approvals to fit individual processes
- Intuitive proposal and deal maintenance tool, with ability to create client-specific attributes to tailor the user experience
- Easily integrates with ad servers and surrounding systems via web services, enabling a unified yet unique ad sales ecosystem



IPgallery 117 Ahuza St Raanana, Israel

For more information visit www.ipgallery.com

Service Provider of Choice for Any Service, Anywhere, Anytime and on Any Device

IPgallery empowers MSOs to position themselves as the Service Provider of Choice for any service, anywhere, anytime and on any device; to quickly and cost effectively deliver unified and personalized services that provide a distinguished customer experience; to generate revenues; and to build brand loyalty.

IPgallery allows rapid rollout of advanced apps and services supporting mobility for Private and SOHO/SMB consumers. IPgallery's converged Voice, Data, Messaging and Video communication solutions utilize HTML-5 thin-client and offers innovative communication services on general-purpose machines in the Cloud/NFV.

IPgallery's solutions enable MSOs to leverage their assets including customer base, Wi-Fi networks, Content Rights etc., turning the voice, messaging and video based challenges into new growth opportunities, and transforming from Native to Cloud hence lowering TCO and shortening time to market.



Irdeto 300-2500 Solandt Dr. Kanata, ON K2K3G5 Canada

For more information visit www.irdeto

Support Multiple Viewing Options During the Content Lifecycle with Irdeto

Today, customers want and expect to be able to access premium video content on their personal devices. Offering a service that allows this will attract and retain customers and will support ARPU growth through provision of new services such as "download and go" and "instant video PPV".

But studios and content owners require that their content is appropriately protected in an OTT distribution system – during transmission, storage and playback.

Irdeto Rights supports live streaming to provide maximum reach across the widest possible range of popular end-user devices, leveraging exclusive Irdeto technologies in addition to widely used industry DRMs. It strengthens an operator's business model by reinforcing the content protection of an operator's OTT service to meet licensing requirements for premium content and simplify OTT operations across an increasingly complex ecosystem.

Irdeto Rights supports live streaming, multiple VOD and download & go viewing options as well as a full range of business models to provide additional revenue streams from the licensed content, in addition to optimal scalability for the growing viewer demand for live content and exclusive titles. There are several implementation options possible with Rights, which, on the server side, can be run in the cloud, on the customer's premises or even as a fully managed service.

Irdeto will demonstrate a unique component feature of this solution by showcasing how we are enabling MSOs the world-over to easily publish their content to any platform of their choosing, managing such important attributes as metadata, without disrupting operator processes or requiring the duplication of the content encoding stage, making it a streamlined and stable solution.



JetHead Development 1815 Aston Ave, Ste 101 Carlsbad, CA 92024

For more information visit www.jetheaddev.com

DLNA CVP-2 Client Software Stack

JetHead, a leader in Remote User Interface technology, has developed a portable DLNA CVP2 compatible client software stack that can be easily integrated into video capable consumer electronic products, such as set-top-boxes, game consoles and connected TV's. DLNA CVP2 allows any MVPD to deliver their full user experience to 3rd party devices, as mandated by the FCC.

The DLNA CVP2 guidelines define how to use HTML5 to deliver the MVPD graphical user interface, and also incorporates DTCP-IP, http, UPnP, Authentication, Power Management and Diagnostic technology.

In this demonstration, the JetHead CVP2 client stack is running on a Broadcom BCM97251 STB Reference platform and shows the power and flexibility of the JetHead DLNA CVP2 based solution.

JetHead Development has many years of experience developing in-home server-client embedded systems for the MVPD community and has the experience necessary to successfully deploy DLNA CVP2 on your embedded platform.



Jinni 10 Amal St Tel Aviv, 48092, Israel

For more information visit **www.jinni.com**

Jinni - Powering Next-Gen TV UX

Hook Subscribers with Next-Gen Personalized Discovery that makes finding great content as fun as watching it.

myrlad

Myriad Group AG Bahnhofstrasse 64 Zurich, 8011, Switzerland

For more information visit www.myriadgroup.com

Myriad Connect & Share DLNA CVP-2 Server Clients

The Myriad Connect & Share DLNA CVP-2 server and client product delivers a standardized, cost-effective way to rapidly reach more devices with premium content securely in the home network. Myriad's modular DLNA CVP-2 product provides the ability to connect a wide range of consumer electronics devices, including Android, providing interoperability and access to MSO's premium and cloud based services on any device.

At CableNET, Myriad will demonstrate its CVP-2 Android and Linux clients on diverse range of CE devices. Myriad's product will enable these devices to access MSO Electronic Program Guides through Myriad's CVP-2 server on a video gateway, browse and stream premium content on a variety of CE devices including an Android HDMI dongle, Android tablets, Linux IP set-top box and demonstrate access to other cloud services. Myriad will also demonstrate a number of other unique capabilities of its Connect & Share DLNA CVP-2 product including a CVP-2 enabled DMC web service which creates a connected content viewing experience across all devices in the home.



NAGRA Route de Geneve 22 Cheseaux, 1033, Switzerland

For more information visit www.nagra.com/dtv

NAGRA HomEdge Gateway

Powered by OpenTV 5 and NAGRA's studio grade DRM (NAGRA MediaAccess PRM), the NAGRA HomEdge gateway enables the secure delivery and sharing of premium content within the home on multiple devices, including live, on-demand and recorded content. The solution leverages NAGRA's JoinIn reference architecture to accelerate the launch of new multiscreen and connected home services for operators worldwide. Its plug-and-play format adds convenience for service providers and consumers alike providing easy access to high-quality content.



Nuance Communications 1 Wayside Rd Burlington, MA 2183 USA

For more information visit www.nuance.com

Let Your Voice Do The Surfing!

Dragon TV enables a seamless user experience for television, improving content discovery and enabling users to complete tasks faster than ever before. Whether navigating the program guide, scheduling recordings, or interacting via social media, Dragon TV optimizes living room interactions, empowering users to spend less time finding content and more time consuming it.

The Dragon TV suite of technologies includes TV command, control, and search, NLU support to allow consumers to simply make requests using natural language, Vocalizer Expressive for high-quality, natural sounding text-to-speech, and Voice Biometrics for identifying users by voice to support user profiles, preferences, and security. Dragon TV technologies can be embedded directly into televisions and set-top boxes or can be incorporated into a second-screen application running on an iOS or Android smartphone or tablet.

We look forward to seeing you at our CableNET stand!



S3 Group South County Business Park Leopardstown Dublin 18, Ireland

For more information visit www.s3group.com/tv-technology

Using Engineering Data to Improve and Assure Service Delivery

With the advent of test automation Development and QA teams are now capturing large amounts of detailed functional and performance data across device platforms, services, and software releases. With the use of test automation expanding to include live service monitoring, operational data is now also being captured in these test repositories. While the typical use of this data is to assess a pass or fail rate for a test case, this detailed information contains useful insights for Development, Operations, Product Management, and Support.

This demonstration showcases how existing engineering and operational data, as captured in the StormTest® test automation platform, can be surfaced to:

- Add context and depth to understand the overarching functional quality of Linear TV, VOD, DVR, EPG, device models, and software releases.
- ► Track trends and changes to the customer Quality of Experience e.g. time to bring-up the EPG, channel change time, time to boot, changes in video quality.
- Assure service availability e.g. is it possible to purchase all VOD assets, play an asset, rate the stability of cloud services, etc.
- ▶ Initiatives such as nDVR, multiscreen applications, and RDK-based gateways are collapsing release cycle windows. Under these conditions, successfully delivering a seamless TV service requires more coordination and responsiveness than ever. The data contained in test automation repositories is an under used asset, which can assist developers, operations, product managers and customer support in the delivery of high quality video services.



Sequencia Technologies, Inc. 401 Edgewater PI, Ste 570 Wakefield, MA 01880 USA

For more information visit **www.sequenciainc.com**

Aligning Infrastructure and Operations to Video, Voice and Data Services

The cable user base is declining due to universal access to over the top content. Cable operators are being compelled to change their business models to align their infrastructure and operations to the most valued user services they provide. Every MSO is investigating the viability of moving to a cloud-based infrastructure in order to streamline video, voice and data operations to offset the financial pressures stemming from increased operating and programming costs. The primary stumbling block is that a migration to cloud is complicated and risky, as it can come at the expense of maintaining production grade, five nine's service quality. James Kelso the former VP Engineering at Cox Communications will outline in simple terms, the what, when, how, and why of one cable operator that has aligned their infrastructure to services, streamlined operations and reduced costs. This cable operator has migrated to an advanced private cloud infrastructure to ensure five nine's quality is achieved and continually maintained across all video, voice and data services.

✓ SiliconDust

HomeRun®

Silicondust USA Inc. 5627 Stoneridge Dr, Ste 317 Pleasanton, CA 94588 USA

For more information visit www.hdhomerun.com

Video Gateway Products with CableCARD

Silicondust is a global innovator in the arena of digital TV to IP gateways. With products ranging from our new line of TECH4 ATSC, QAM, and DVB-T/T2/C to IP multicast gateways and 24 channel bulk transcoder to our HDHomeRun PRIME consumer video gateway featuring support for CableCARD conditional access and operating as a DLNA DMS, we support a diverse customer base ranging from consumers to enterprises to cable providers.

TECH4 devices provide enterprises and cable providers with an affordable way to receive broadcasts and make them available via IP multicast, with the TECH4-24x device able to convert 24 streams to H.264 format for more efficient distribution. With a dedicated ARM CPU available for user applications, each TECH4 device can be customized to meet the needs of a wide array of customers.

HDHomeRun PRIME is compatible with a wide array of PC and smart device based applications, enabling consumers to watch premium content throughout their homes.



Visible World 460 W 24th St, 14th Fl New York, NY 10001 USA

For more information visit www.visibleworld.com

Conductor Video Platform

Visible World's solutions address both MSO Ad Sales and also MSO cross-channel Marketing needs. Our award-winning targeted TV advertising technology and applications, along with a patented delivery system that conserves precious bandwidth, helps create value for both cross-channel Marketing and Ad Sales. Automation makes handling multiple targeted ads no more difficult than traditional TV campaigns while transparent audience selling mechanisms make it easier than ever to get greater value from non-premium ad inventory. See how targeted TV advertising increases the value of your cross-channel marketing efforts, as well as the value of your TV ad inventory.



Zodiac Interactive 108 B New South Rd Hicksville, NY 11801 USA

For more information visit www.zodiac.tv

HTML5 and Set-Top Software Stack for Legacy and Next Generation

Showing an enhanced HTML5 browser optimized for set tops, DVB stack in combination with PowerUP middleware services layer to provide common set-top device software for all legacy and next generation devices for Cisco and Arris distribution systems.



www.cablelabs.com