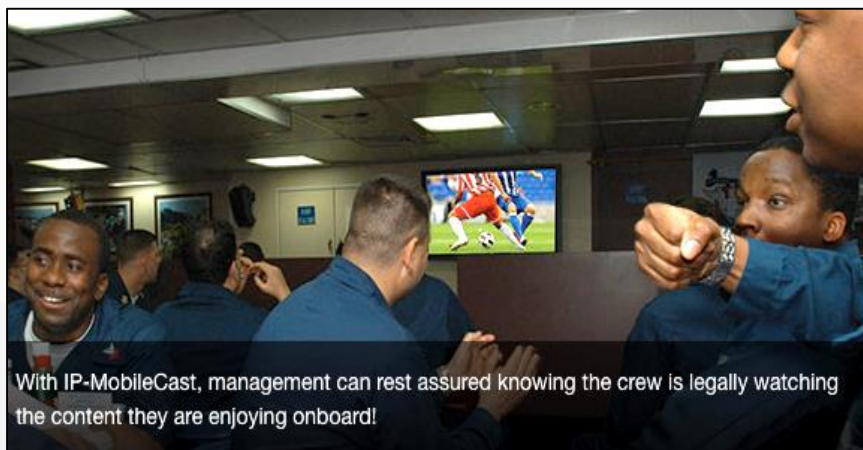


KVH, PerceptionTV and ARRIS

bring sailors waves of entertainment

With sailors working so far from home for months at a time, having quality on-board entertainment is essential to their wellbeing. KVH has overcome the challenges of bringing up-to-date content to ships around the world through their IP-MobileCast service. This innovative entertainment service allows crews to view everything from Hollywood films and international television favorites through to up-to-date news coverage and sporting highlights. Content is securely delivered to devices across the ship using Perception TV's reliable content delivery platform and ARRIS's SecureMedia range so sailors can enjoy what they want to watch at a time convenient for them.



With IP-MobileCast, management can rest assured knowing the crew is legally watching the content they are enjoying onboard!

The Challenge: Bringing great content to those at sea

As the merchant fleet continues to grow, 57,000 ships as of 2013, there comes an increase in the demand for a quality downtime entertainment service. To fulfil this demand KVH, a leading provider of satellite, high-speed internet, television and voice services, needed a simple to use, content-rich, on-demand solution that not only met the stringent security requirements of their content providers, but could also solve the technical challenges of delivering that content to ships at sea where conditions can make internet access difficult.

KVH

- More than 60 years' experience in providing versatile, cost-effective services
- A market share leader in the rapidly growing maritime satellite industry
- Services delivered to over 13,000 destinations daily in more than 140 countries

PerceptionTV

- Creators of a complete and fully scalable IPTV platform with industry leading cloud based features
- Developers of cutting edge multiscreen IPTV solutions for telcos, broadcasters and ISPs
- Services delivered worldwide

ARRIS

- Global innovator in IP, video and broadband technology
- Creators of digital TV and the first wireless broadband gateway
- Leader of the standards and pathways for tomorrow's personalized, Ultra HD, multiscreen and cloud services

The Solution: An innovative content delivery platform with secure offline content protection enabling the delivery of top-class entertainment by global satellite communication.

The 3-way collaboration of KVH, PerceptionTV and ARRIS was a surefire way to ensure KVH’s vision for the service became a reality.

This required:

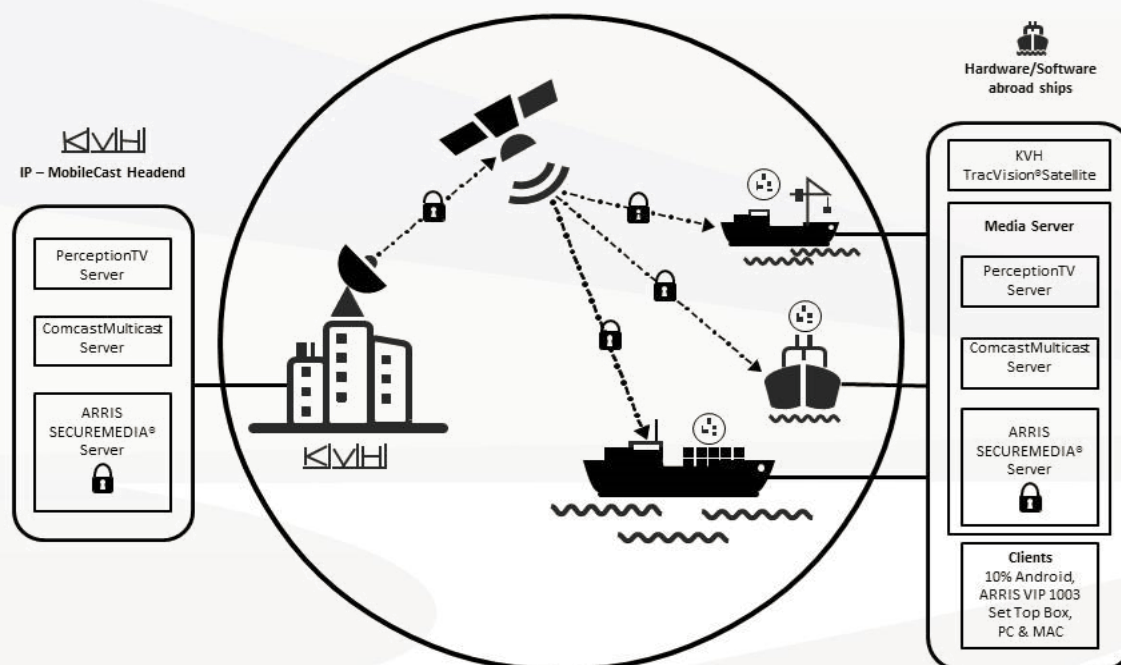
- KVH to license and deliver high quality entertainment content, delivered over its IP-MobileCast satellite service to ships all over the world.
- PerceptionTV’s innovative multiscreen technology to handle the on board streaming to multiple screens.
- ARRIS’s award winning SecureMedia series, to smoothly and securely play content on any approved device connected to the IP MobileCast system.

"The IP-MobileCast service is revolutionary in the richness of fresh content that can be delivered to mariners at sea, who up until now have not had access to updated news, sports, TV, or movies on-board their vessels."

"Now, mariners in the middle of the ocean can experience an incredible amount of news and entertainment content the entire time they are at sea, and maritime operators can benefit from providing crew welfare services reliably and affordably."

Martin Kits van Heyningen
KVH Chief Executive Officer

How it Works



KVH's IP-MobileCast service beams content down to an onboard 2U rack mountable media server. Present on the server is the content delivery platform from PerceptionTV which streams KVH's programming to its interactive companion app installed on set-top boxes, computers and personal devices all around the ship.

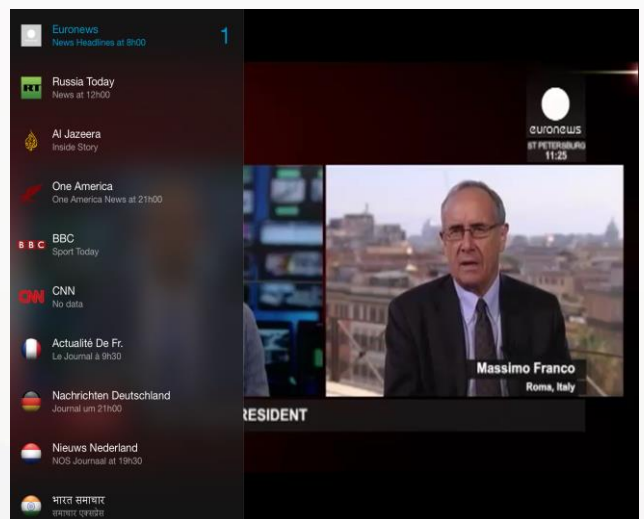
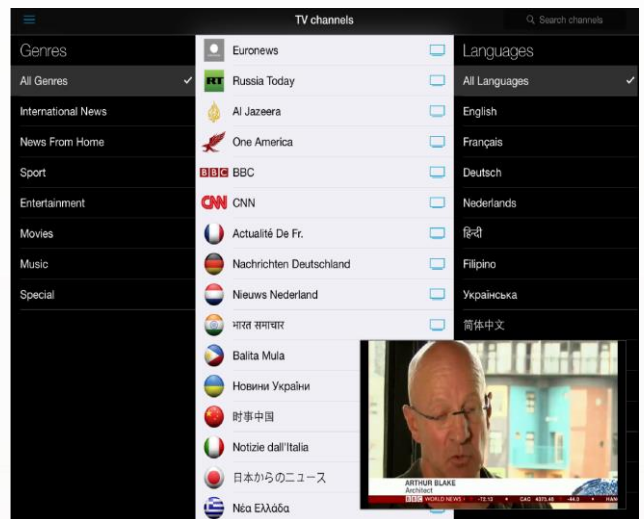
PerceptionTV creates linear TV channels on the fly from the content storage server; so crew members can enjoy a home-like TV viewing experience, streamed over the wired and wireless networks on-board.

To watch content on mobile devices, registered users simply download the iOS or Android IP-MobileCast apps, customized and branded by PerceptionTV for KVH, onto their devices to access the services whilst on ship anywhere in the world. Should they have to move between ships, nothing needs to be reconfigured or downloaded again; ensuring access to quality entertainment will remain as simple as ever.

ARRIS's SecureMedia® Encryptonite One™ System provides an extensive range of conditional access and DRM tools, allowing KVH to distribute up-to-date content to sailors across the ship whilst meeting the strictest Hollywood studio security requirements.

Strict hybrid encryption channels ensure that content is persistently encrypted in storage and during the delivery process. A separate flexible content encryption layer provides an option for each data sample to be uniquely encrypted for added protection with IDetect, root and jailbreak tamper detection technologies to prevent any illegal viewing.

Carrying out DRM authentication offline was critical to the success of the project as it meant that users did not require an internet connection to use the IP-MobileCast service.



Summary: Collaborating to do more

This combination of services and technology has delivered a very powerful product and service benefitting sailors all over the world.

KVH, PerceptionTV and ARRIS leveraged their expertise in video and content protection to scope and deliver the IP-MobileCast service in under a year.

To learn more about the SecureMedia suite of products, visit:

<http://www.arris.com/products/product.asp?id=876>