

Telecom COTS World

Broadband Broadcast IoT Convergence

Future Communications
Infrastructures
Cloud - Data Centers
Video Networks
Internet of Things

Telecom COTS World is a Global Publication of e2mos

Mar-Apr 2016



Mobile Edge Computing platform that delivers data center performance Built for extreme outdoor environments

There are over 5 million cell towers globally
By adding Edge Cloud Servers, operators can save up to 35% on backhaul usage from the Radio Access Network to the existing application server

The ADLINK SETO-1000 is
Intel® Xeon®-based
see page 4

In this Edition

5G Partnerships
RAN Market \$7 B by 2020
More Mergers & Acquisitions
Facebook on AI with NVIDIA
Video to the Cloud
TV in 2016
UHD Alliance
Security
Subsea Cable
from over 30 Companies

In this Edition:

Telecom - Networks - Media - IoT

ADLINK Technology Accelerates Deployment of Network Functions Virtualization at the Network Edge with Complete NFV Infrastructure Solution (p.3)

Tele2 starts NFV roll-out with OpenStack
Tele2 moves internal infrastructure to the cloud to cater for 5G (p.5)

Cisco Announces \$500 Million Investment to Accelerate Country Digitization in Germany (p.8)

KT, SKT, DoCoMo, Verizon form 5G trial specification alliance (p.11)

SK Telecom, Samsung complete 5G field trial (p.11)

SKT, Deutsche Telekom team on 5G, IoT & media platform (p.12)

Facebook to open-source AI hardware design - Based on NVIDIA Tesla Accelerated Computing Platform and PCI-e (p.16)

Broadcast Video - Digital TV

The TV Industry in 2016 — The Increasing Speed of the Cloud (p.13)

UniversCiné creates VoD platform supported by Unified Streaming (p.14)

UHD Alliance Defines Premium Home Entertainment Experience (p.14)

Akamai Opens 'Scrubbing Centre' in Sydney to Combat Increasingly Sophisticated DDoS Attacks (p.15)

RAN

Industry's First High Performance Mobile Edge Computing Platform Designed for Extreme Environments and Outdoor Telecom/Networking from ADLINK Technology (p.4)

Platforms for vRAN & Mini-cRAN from ARTESYN
Based on MaxCore™, PCIe and Dual 16-core Intel® Xeon® D-15xx including HA « High Availability » (p.7)

RAN Market: Small Cells, LTE & 5G to Grow over \$7B by 2020 (p.16)

Subsea Cable

Telstra, Singtel agree to build Perth-Singapore cable (p.11)

M & A

Avago (finally) Completes Acquisition of Broadcom - \$17 billion (p.16)

Beamr Announces the Acquisition of Vanguard Video and a \$15M Investment Round (p.10)

Cisco Completes Jasper Acquisition for \$1.4bn (p.12)

GigOptix, Inc. to Acquire Magnum Semiconductor, Inc.
Company to Be Renamed GigPeak, Inc. (p.9)

People

Andrew S. Grove, Intel 1936 – 2016 (p.6)

Elop is back with leading role at Telstra on 4 April
Ex-Nokia CEO Elop joins Telstra, as does former Optus boss (p.5)

Telecom COTS World - Mar-Apr 2016

Daniel Dierickx
CEO & co-Founder
at e2mos
Acting Chief Editor



About this Magazine Telecom COTS World

Market coverage Worldwide:

- Telecom Infrastructures
- Cloud
- Data Centers
- Video Networks/Broadcast
- IoT & M2M

Editor/Publisher

e2mos www.e2mos.com
Contact: mgt@e2mos.com

About e2mos

e2mos is a Marketing and Business Development Services Company located in Belgium the middle of the World Market to provide Day Time Access Worldwide.

e2mos has over 30-years Market Expertise & Global Customer Relationship and owns a Large Global Premier Database
www.e2mos.com

Our 4 Magazines

Global & FREE
Just Click on the Logos

IoT World

Telecom COTS World
Broadband Broadcast IoT Convergence

Embedded Systems World

ATCA World

ADLINK Technology Accelerates Deployment of Network Functions Virtualization at the Network Edge with Complete NFV Infrastructure Solution



Featuring Wind River Titanium Server software, new pre-integrated hardware, software and services platform provides carrier-grade reliability, scalability and performance

San Jose, CA – March 22, 2016 – ADLINK Technology, a leading global provider of Application Ready Intelligent Platforms (ARiPs) and compute building blocks that enable the Internet of Things (IoT), today announced a pre-integrated network functions virtualization (NFV) platform designed to enable telecom equipment manufacturers (TEMS) and communications service providers (CSPs) to accelerate production of NFV deployments. The ADLINK NFV solution features Wind River® Titanium Server™, the industry's first fully integrated and feature-complete NFV infrastructure software platform, available on ADLINK's SETO-1000 extreme outdoor server and Modular Industrial Cloud Architecture (MICA) platform. The complete NFV infrastructure offering is designed to deliver optimized media processing and communications for today's bandwidth-intensive applications.

The ADLINK NFV solution offers optimized software stacks and a mesh topology for maximum throughput and redundancy. All carrier-grade hardware is offered as part of a modular delivery system with an open/closed NFV solution architecture that enables TEMs and CSPs to easily customize functionality based on application requirements without compromising security or increasing time-to-deployment. In addition, the NFV solution ensures system compatibility and future-proofing with APIs based on open source and de facto open standards.

Target virtualization applications include:

- **Mobile Edge Computing (MEC)**
- **Customer premises equipment (CPE)**
- **Radio access networks (RAN)**
- **Deep packet inspection (DPI)**
- **Broadband remote access server (BRAS)**
- **Content delivery networks (CDN)**
- **Media processing**
- **Policy management**
- **Security**
- **LTE Core**

"As part of our Wind River Titanium Cloud ecosystem, ADLINK has worked closely with us to validate and offer their NFV solution pre-integrated with Wind River Titanium Server software," said Charlie Ashton, senior director of business development for networking solutions at Wind River. "By integrating Titanium Server with ADLINK's rugged hardware platforms, NFV can be achieved at the network edge or in the data center, providing users with greater opportunities to maximize the performance and capacity of their NFV implementation and reduce operating expenses. With Titanium Server as a software foundation, the industry can accelerate their NFV goals while ensuring carrier grade uptime and strict reliability mandated by telecom networks."

"Our carrier grade COTS solution allows TEMs and CSPs to accelerate time-to-market on their virtualization applications, removing the need to integrate, test, and provide support for multiple technology components from different vendors and open source," said Yong Luo, general manager of ADLINK's Embedded Computing Product Segment. "With a ready-to-use platform, customers can focus their development activities on revenue-generating applications instead of the building blocks required for complex networking and communications solutions."

ADLINK's SETO-1000 is the first high-performance MEC platform specifically designed for extreme environments and outdoor telecom/networking applications. Based on the dual Intel® Xeon® E5-2400 v2 family of processors, the SETO-1000 MEC platform enables delivery of data center performance at the edge of the network. The SETO-1000 provides IT and cloud-computing capabilities within the Radio Access Network (RAN) in close proximity to mobile subscribers, offering a service environment characterized by proximity, ultra-low latency, and high-bandwidth that allows content, services, and applications to be accelerated, maintaining a customer's high-level Quality of Experience (QoE).

ADLINK's MICA platform is an Application Ready Intelligent Platform (ARiP) for industrial cloud computing that adopts an innovative modular design for upgraded scalability and flexibility. Customers can choose from different functional modules (compute, switch, storage, and IO modules) depending on their specific application requirements to build a highly tailored computing platform. The hybrid design allows customers to mix and match between 1/4 and 1/2-width slot compute nodes in order to scale the number of independent systems with different processing capacities in the platform, as needed.

NFV solutions that are pre-validated with Wind River Titanium Server must feature Intel® Xeon® processors and at least 500 GB of storage and 15 GB of RAM, support network interface controllers (NICs) with 1, 10, and 40 GB DPDK-enabled ports, and are recommended to have two cores for OS and virtual switching.

Titanium Server is a carrier grade NFV infrastructure software solution that is designed to meet the stringent "always on" requirements of the telecom industry. Based on open standards including carrier grade Wind River Linux, real-time Kernel-based Virtual Machine (KVM), OpenStack®, and Data Plane Development Kit (DPDK), while incorporating optimizations for Intel® architecture. For more information <http://www.windriver.com/products/titanium-server/>.

ADLINK's NFV solution, please visit www.adlinktech.com/MICA and [www.adlinktech.com/mobile edge computing](http://www.adlinktech.com/mobile_edge_computing)

Industry's First High Performance Mobile Edge Computing Platform

Designed for Extreme Environments and Outdoor Telecom/Networking



SETO-1000

Intel® Xeon® Processor E5-2400 v2 Series

There are over 5 million cell towers globally.

By adding Edge Cloud Servers, operators can save up to 35%



on backhaul usage from the Radio Access Network to the existing application server.

By 2018, it is estimated that 84% of all IP traffic in the US will be made up of gaming, video and streaming web content, with users demanding low latency and improved QoE. With Edge Cloud Architectures, it is estimated that latency will be reduced by 50%.

ADLINK's [SETO-1000](#) is a specialized server designed for extreme, harsh outdoor environments. This [SETO-1000](#) is a one of a kind compute device powered by two of the latest Intel® Xeon® E5 processors. It supports up to 96Gb of memory, features multiple I/O options and dual swappable SATA storage bays.

The [SETO-1000](#) provides a powerful common platform architecture for virtualized Radio Access Equipment for 2G, 3G and LTE. It enables consolidated security, remote management, open applications and reduction of hardware footprint.

Designed for Harsh Environments

-40°C to 55°C operation

NEBS shock & vibration (design))

IP65 intrusion protection



Server Grade Performance

Dual 10-core Xeon® E5-2400 v2

6x DDR3L RDIMM sockets

Dual 10G SFP+ optical ports

Dual GbE RJ-45 ports

Intel® Communications Chipset 8920 crypto engine

Dual swappable SATA storage bays

IPMI 2.0 management interface

48VDC nominal input

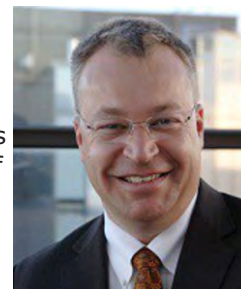
Operators can utilize the [SETO-1000](#) to implement a virtualized Cloud Radio Access Network by integrating 2G, 3G and LTE RAN gear onto a virtualized cloud server. This enables the reduction of proprietary build gear by utilizing an ETSI standardized MEC server, saving both OPEX and CAPEX for the operator. The [SETO-1000](#) provides a powerful common platform architecture for virtualized Radio Access Equipment and enables consolidated security, remote management, open applications and reduction of hardware footprint.

Elop is back with leading role at Telstra on 4 April

Ex-Nokia CEO Elop joins Telstra, as does former Optus boss

Australia's largest operator Telstra today named controversial former Nokia CEO Stephen Elop to a new role of group executive for technology, innovation and strategy.

Elop (pictured) served as Nokia's CEO and orchestrated Microsoft's acquisition of the Finnish firm's mobile phone and devices business in 2013. Upon closure of the Microsoft deal, he became EVP of the Microsoft devices group and served in that role until July of last year when he left as part of a management reshuffle.



"Stephen will immediately add major firepower to our team with his extensive and deep technology experience and an innate sense of customer expectations," said Andrew Penn, Telstra CEO.

However, many in Finland express less admiration for Elop, the first non-Finn to head the country's most prestigious company. His tenure saw falling revenue and profit, culminating in the handset sale to Microsoft.

Prior to joining Nokia, Elop was president of the Microsoft business division. He also was COO at Juniper Networks and held senior positions at Adobe and Macromedia.

He will report directly to Penn and be based jointly in the US and Australia. Penn said Elop was a "significant appointment reinforcing Telstra's ambitions to be a world-class technology company".

The technology, innovation and strategy portfolio brings together Telstra's chief technology office, chief scientist, its software group and corporate strategy, with links into product development functions.

New retail head

Telstra also named Kevin Russell as group executive for its retail unit, which includes the company's consumer, business, stores and product functions.

Russell has held executive roles for Singtel Optus, most recently as country chief officer and CEO for consumer, Australia, as well as senior positions at Hutchison Whampoa Group in Australia and internationally. He also had held senior roles in the US, Europe and the Middle East. Russell, who joins next month and will also report directly to Penn, is currently CEO for a Silicon Valley-based technology startup. He replaces Karsten Wildberger, who resigned in December and will return to Europe in April.

Tele2 starts NFV roll-out with OpenStack

Tele2 moves internal infrastructure to the cloud to cater for 5G

Stockholm 23-Feb-2016 -- Tele2 AB, (Tele2), (NASDAQ OMX Stockholm: TEL2 A and TEL2 B) today announces a shift in technology whereby Tele2's Network & IT functions are moved to the cloud.

Tele2 has decided to move its Network & IT functions into the cloud, using Network Function Virtualization (NFV) in order to enable a smarter, user-friendly, future-proof and even more cost efficient internal management. This exciting shift of technology will enable Tele2 to deliver a wider set of services to its customers within all segments including Business, Consumer and Internet of Things (IoT). Big Data with advanced analytics will also be vital part of the implementation.

Niklas Sonkin, EVP and COO, Tele2 AB, comments: "This is an important step for Tele2 in further strengthening our position as a technology frontrunner. We are strong believers in 5G and are actively contributing to the evolution of 5G as a member of NGMN. The 5G standard will be ready by 2020 and in the field one or two years later. Cloud and virtualization are important building blocks in the foundation of 5G technology."

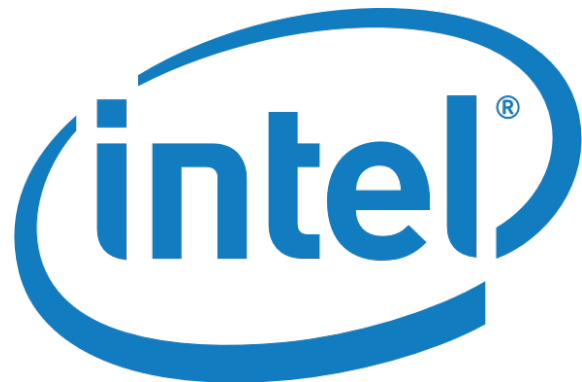
Tele2 is embracing open source as a way to speed service deployment and keep costs low. Tele2 has therefore chosen OpenStack as the foundation for our private cloud. Canonical will provide and manage OpenStack for Tele2 and Canonical's generic VNF manager, Juju, will be used for the onboarding of new services. Huawei will be providing the rack mount servers. Cisco is the chosen Network Vendor and will provide their ACI solution. The entire data center network will be built on a future proof spine/leaf network with modern 25Gb/100Gb connectivity.

Tele2 expects to have the first live application in the form of a virtual Evolved Packet Core (vEPC) in the cloud by Q3 this year.

TELE2 IS ONE OF EUROPE'S FASTEST GROWING TELECOM OPERATORS, ALWAYS PROVIDING CUSTOMERS WITH WHAT THEY NEED FOR LESS. We have 14 million customers in 9 countries. Tele2 offers mobile services, fixed broadband and telephony, data network services, content services and global M2M/IoT solutions. Ever since Jan Stenbeck founded the company in 1993, it has been a tough challenger to the former government monopolies and other established providers.

Andrew S. Grove 1936 – 2016

Andrew S. Grove was chairman of the board of Intel Corporation from May 1997 to May 2005. He was the company's chief executive officer from 1987 to 1998 and its president from 1979 to 1997



SANTA CLARA, Calif, March 21, 2016 – Intel announced that the company's former CEO and Chairman Andrew S. Grove passed away today at the age of 79.

Present at Intel's 1968 founding with Robert Noyce and Gordon Moore, Andy Grove became Intel's President in 1979 and CEO in 1987. He served as Chairman of the Board from 1997 to 2005. Both during his time at Intel and in retirement, Grove was one of the most influential figures in technology and business, writing best-selling books and widely cited articles, and speaking out on an array of prominent public issues.

"We are deeply saddened by the passing of former Intel Chairman and CEO Andy Grove," said Intel CEO Brian Krzanich. "Andy made the impossible happen, time and again, and inspired generations of technologists, entrepreneurs, and business leaders."

Born András Gróf in Budapest, Hungary, Grove immigrated to the United States in 1956-7 having survived Nazi occupation and escaped Soviet repression. He studied chemical engineering at the City College of New York, completing his Ph.D at the University of California at Berkeley in 1963. After graduation, he was hired by Gordon Moore at Fairchild Semiconductor as a researcher and rose to assistant head of R&D under Moore. When Noyce and Moore left Fairchild to found Intel in 1968, Grove was their first hire.

Grove played a critical role in the decision to move Intel's focus from memory chips to microprocessors and led the firm's transformation into a widely recognized consumer brand. Under his leadership, Intel produced the chips, including the 386 and Pentium, that helped usher in the PC era. The company also increased annual revenues from \$1.9 billion to more than \$26 billion.

Grove was both an astute engineer and a careful student of business management. His books *High Output Management* (1983) and *Only the Paranoid Survive* (1999) remain some of the most highly regarded management books.

"Andy approached corporate strategy and leadership in ways that continue to influence prominent thinkers and companies around the world," said Intel Chairman Andy Bryant. "He combined the analytic approach of a scientist with an ability to engage others in honest and deep conversation, which sustained Intel's success over a period that saw the rise of the personal computer, the Internet and Silicon Valley."

Grove and his wife, Eva, were married for 58 years and had two daughters and eight grandchildren.

While leading Intel and in retirement, Grove was active in philanthropy and public advocacy for issues deeply personal to him. Diagnosed with prostate cancer, he authored a 1996 cover story in *Fortune* that explained his decision to undergo an unconventional, but ultimately successful treatment. He contributed to Parkinson's research and urged the medical community to more efficiently study the disease, from which he suffered. He provided \$26 million to the City College of New York to help establish the Grove School of Engineering, and made countless generous gifts to a wide variety of charitable causes.

EDITOR NOTE

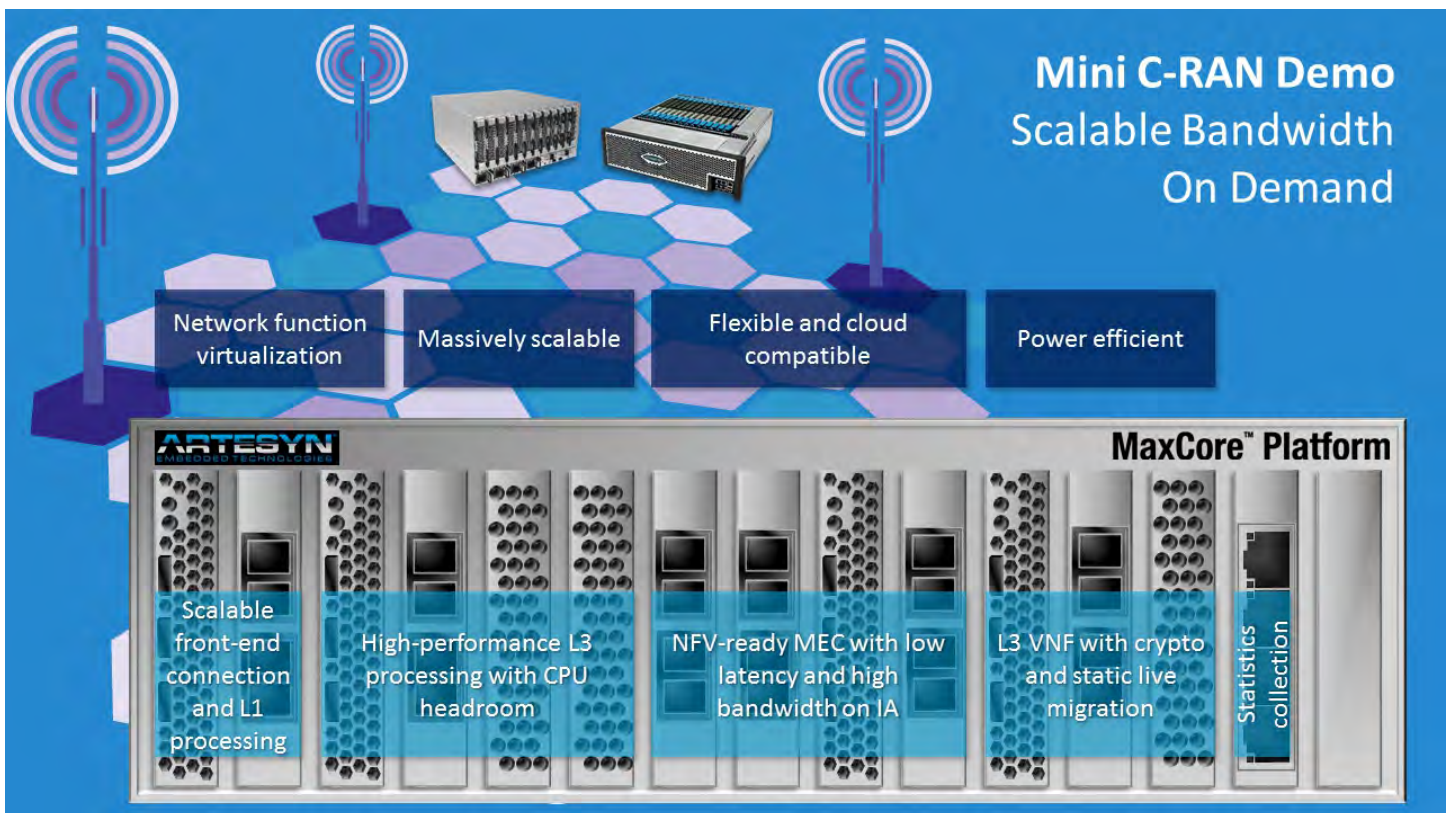
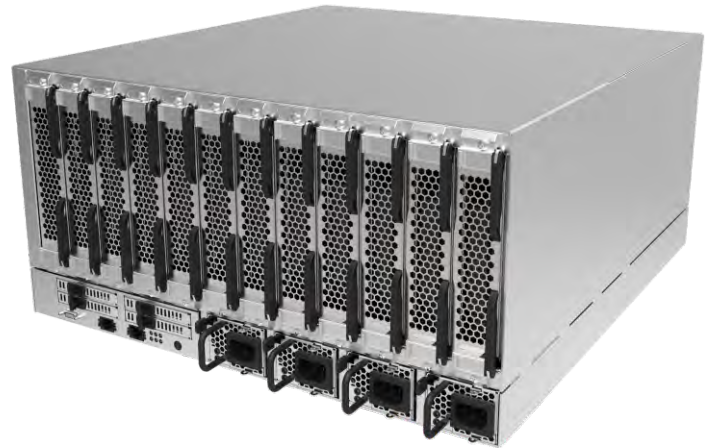
The entire Chip Industry will remember Andrew.

I met him in the Silicon Valley in the 80's, simply an extraordinary person.

Daniel Dierickx, Chief Editor of TCW (acting)

Based on MaxCore™, PCIE and Dual 16-core Intel® Xeon® D-15xx including HA « High Availability »

Centralizing and virtualizing the baseband processing of 4G networks today and 5G networks of the future can have profound payoff both in CapEx and OpEx. For example a Mini-cRANs allow mobile operators to provision baseband processing in real-time where it's needed such as at an arena during a sporting event and at an office complex during business hours. This allows for far less over-provisioning, cutting down both CapEx and OpEx.



- High availability platform with hotswap cards and no single point of failure maximizes uptime and service availability for wireless customers
- Hot swappable Server cards with dual 16-core Intel® Xeon® D-15xx processors provides a powerful compute platform for both baseband processing and Mobile Edge Computing (MEC)
- Hot swappable intelligent NIC cards provide multiple redundant 100G Ethernet interfaces for dense ingress/egress
- Enables L1 - L3, MEC, and security functions to be implemented in the same chassis
- High front-haul and back-haul bandwidth enables access to cloud computing capability
- Available hotswap slots for L1 cards enables flexibility for vRAN deployment
- Hot swappable carrier for standard PCIe cards ensures flexibility and no vendor lock
- Accommodates built-in or customer-designed telecom clocking modules, ensuring synchronization with the network
- Small footprint (450mm depth and standard 19" rack compatibility) ensures global equipment practice compatibility
- Design for NEBS/ETSI environments ensures ruggedness and the ability to deploy in Central Office environments

Technical Info: Datasheet, Whitepapers, Videos [Click Here](#)

Application Notes: • Cloud RAN – Doing More with Less [Click Here](#)

• Build your vRAN with Lower CapEx and OpEx [Click Here](#)

Cisco Announces \$500 Million Investment to Accelerate Country Digitization in Germany

BERLIN, GERMANY and SAN JOSE, CA - Mar 8, 2016 - Cisco (NASDAQ: CSCO)

- Focus: Innovation, Security and Education
- Investment on top of current programs
- Digitization: "A unique opportunity for Germany"

"Digitization goes beyond connectivity. It gives you the ability to secure data, act on data and deliver value based on data," says Oliver Tuszik, general manager Cisco Germany. "Digitization benefits countries, cities, companies and every one of us. It creates competitiveness, improved public services and better quality of life, particularly amongst the demographic changes over the next years. We would like to make our contribution to this transformation, in addition to our ongoing investments."

The program is called "Deutschland Digital" and focuses on innovation, security and education. Planned investments foresee funds for specific digitization projects, research projects, an expansion of the Cisco Networking Academy®, and direct investments in venture funds, as well as to human resources and infrastructure spending.

Chuck Robbins, CEO of Cisco, commented: "Germany has long been known for its focus on innovation, and digitization opens up unprecedented opportunities for the country. With our increased investments in education, innovation and security, we can help create a digital Germany that can bring even greater value to the country and its citizens. Cisco is honored to partner with Germany on 'Deutschland Digital.'"

Innovation

"Innovation is an interdisciplinary exercise," says Tuszik, "and no organization can address the challenges of digitization on its own. Therefore, we want to bring together customers, partners, startups and research institutions and work together on solutions." openBerlin is a Cisco® innovation center that opened in 2015 and will play an important part in this.

In addition, Cisco will organize regular innovation workshops, focusing specifically on mid-sized companies. Startups and other partners will be invited, and participants will work together on digital solutions and business models.

Cisco will also expand its investment in start-ups and venture funds in Germany with priority areas such as security, cloud, and Internet of Things (IoT). Cisco is already focused on the emerging startup ecosystem in Germany, having recently made an investment in IoT provider relayr, headquartered in Berlin.

Cisco is also looking to partner with the public sector and contribute to large-scale transformation projects such as smart cities and regions as well as healthcare and utility networks.

Security

"Security and transparency are key enablers of digitization. We aim to provide training programs and a deeper insight for experts into our technologies, thus enabling them to take better decisions when it comes to Security," says Oliver Tuszik.

Cisco plans to fund a research initiative that translates the German privacy and data protection regulations into a software architecture for cloud services. The goal is to develop a blueprint for cloud architectures with off-the-shelf data sovereignty capabilities that meet the strict requirements in Germany.

In addition, Cisco plans to establish a "Security Center of Excellence" in Germany. The aim is to build an ecosystem of customers, partners, academia, and start-ups around security-related challenges and how to solve them. The focus is on finding solutions to specific challenges within a reasonable time frame.

Digital skills, education and research

"People in Germany are the key to success in digitization," says Tuszik. "We will massively expand our educational programs, both for young people and professionals." The focus will be on providing digital competencies for non-IT professionals in small and medium sized companies, including IT skills for installers (Smart Home), nurses (Smart Health) and electricians (Smart Grid). Together with partners, Cisco will develop a learning and collaboration platform for professionals in these and other areas where they can acquire necessary skills and certifications.

In addition, Cisco is going to expand the Networking Academy. Cisco Networking Academy is a non-profit educational program that offers learning materials on IT topics for educational institutions. Cisco plans to increase the number of graduates in Germany from currently 35,000 a year to 80,000 in three years. The core element of the program will be a learning module specifically developed for the German market, focused on the Internet of Things for non-IT jobs.

"Deutschland Digital" is part of Cisco's global strategy of "Country Digitization Acceleration". In Europe, Cisco previously announced investment plans for digitization acceleration in the U.K., France and Italy. "We all understand there is enormous potential in Germany through digitization", says Tuszik. "Now, we need to accelerate and make it a success. This is where we want to make a contribution through our investment."

GigOptix, Inc. to Acquire Magnum Semiconductor, Inc. Company to Be Renamed GigPeak, Inc.

The corporate rebranding reflects the broadening scope and capabilities of the Company, which unites GigOptix's leading high-speed enterprise networking connectivity portfolio with Magnum's world-class expertise in video broadcasting, compression, and analytics to create a lead innovator of semiconductor ICs and software solutions for high-speed connectivity and high-quality video compression over the Network and the Cloud.

SAN JOSE, Calif.--(BUSINESS WIRE)--Apr. 4, 2016-- GigOptix, Inc. (NYSE MKT:GIG), a leading supplier of advanced semiconductor communications components for use in Cloud connectivity, data centers, and high-speed optical and wireless networks, today announced the signing of a definitive agreement to acquire Magnum Semiconductor, Inc., a privately-held Milpitas, California-based provider of silicon ICs, SoCs, software, and IP for the professional video broadcast and IoT camera markets, in a cash and stock transaction valued at approximately \$55 million net based upon the average closing price of GigOptix stock for the trailing thirty day period ended April 1, 2016. The acquisition is expected to become effective tomorrow, Tuesday, April 5, 2016.

Highlights of the Transaction Include the Following Expectations:

Expands and further differentiates the GigPeak product portfolio and addressable markets, providing additional growth opportunities, and expanding the current GigOptix addressable markets of approximately \$1 billion to nearly \$5 billion by adding the broadcasting, IoT, and consumer markets



"We have a long and proven track record of acquiring and integrating cutting edge technology companies in the most financially prudent manner." said Dr. Avi Katz, GigOptix's Founder, Chairman of the Board of Directors and Chief Executive Officer. "We look forward to supporting Magnum's continuing efforts as part of the newly rebranded GigPeak family to drive innovation through their proven and market accepted software-based solutions to deliver best-in-class video and data to the world's leading broadcasting and IoT camera OEMs and customers. The exponential growth in video traffic will further expand the demand for GigOptix's and Magnum's solutions in real-time high-speed and high-quality information streaming, video compression in the cable, satellite, telco/IPTV and mobile/over the top (OTT) markets. The increasing need for powerful video analytics capabilities has also been driving significant interest in Magnum's solutions in the IoT camera markets by major OEMs. We are impressed by Magnum's technology, customers, growth profile, and the technical depth and experience of its engineering team. We are very excited by the many opportunities this combination offers that will enable us to expand our focus from the enterprise networking and cloud connectivity to broadcasting head-ends, IoT, and consumer markets. I also want to personally offer a warm welcome to the entire Magnum team that is joining our family today."

Gopal Solanki, Chief Executive Officer and President of Magnum Semiconductor stated, "The combination of GigOptix's leading edge wired and wireless high-speed communication technology, combined with Magnum's professional quality video compression and SoC hardware and software expertise creates a unique and powerful platform for streaming video. The Magnum team is excited to join forces to develop solutions for a future where video presence is pervasive and widely deployed at both the consumer and commercial premises."

Andy Rappaport, Partner Emeritus at August Capital, Magnum's largest shareholder, said, "Magnum's team has done an extraordinary job creating proven, industry leading video compression and analytics technology serving some of the most demanding customers in the world. By combining Magnum's hardware and software experience and high-margin product portfolio with the complementary product, technology and market leadership, and solid balance sheet of GigOptix, GigPeak is well positioned to sustain both companies' strong positions with their current customers and accelerate growth by developing new solutions for large emerging markets." **Full PR:** [Click Here](#)

About GigOptix, Inc.

GigOptix, Inc. (NYSE MKT:GIG) is a lead designer, developer, and global supplier of a broad range of analog, digital, and mixed signal components to enable high-speed information streaming over the telecom networks, datacom infrastructure, and consumer electronics links. Our ability to innovate and create differentiated products is based on deployment of various semiconductor technologies that span from III-V compounds to SiGe BiCMOS and CMOS-based device designs.

GigOptix's product portfolio provides high-speed and low-power solutions in markets such as fiber-optics telecom, wireless backhaul, datacom and consumer electronics, mil-aero, instrumentation, and medical equipment, for applications such as linecards and transponders, active optical cables and pluggables, point-to-point wireless radios, military warfare, avionics electronics, GPS systems, and diverse medical equipment, such as ultrasound imaging, X-Ray, MRI, CT Scan, and Defibrillators.

About Magnum Semiconductor, Inc. - World-Class Video Compression and Analytics Expertise

Magnum Semiconductor is a leading provider of silicon ICs, SoCs, software and IP for the professional video broadcast and IoT camera markets. Magnum provides top of the line products, tools and technologies for the entire video content creation and distribution chain, from contribution and production through distribution over cable, satellite and IPTV to OTT video streaming. Magnum Semiconductor is headquartered in Milpitas, California, with sales and engineering offices in Canada, China, and Korea.

Beamr Announces the Acquisition of Vanguard Video and a \$15M Investment Round

Move strengthens Beamr's vision to bring high-quality video optimization and encoding solutions to the market

Tel Aviv and Palo Alto – March 29, 2016 – Beamr, the global leader in media optimization solutions, today announced that it is acquiring Vanguard Video, the leading provider of HEVC and H.264 codec technologies, and raising a \$15M funding round led by Disruptive Growth, with the participation of Marker and Innovation Endeavors. The transaction positions Beamr as a global leader in H.264 and HEVC video encoding and optimization solutions, with over 80 employees and offices in Palo Alto, Tel Aviv and St. Petersburg, Russia.

Following the acquisition, Beamr will offer a full array of media compression and optimization solutions to its customers. By integrating Beamr's unique video optimization technology into Vanguard Video's advanced encoder solutions, Beamr will achieve unprecedented levels of video quality at extremely low bit rates, allowing OTTs, Cable, Satellite, Telcos and mobile operators to deliver an exceptional viewing experience over congested networks.

"Today's announcement is exciting on many levels," said Sharon Carmel, Founder and CEO of Beamr. "From an industry perspective, the combination of Beamr and Vanguard Video brings unmatched solutions for the broadcast and OTT content delivery market. For Beamr, the acquisition is an important milestone, and we gladly welcome our new, talented colleagues from Vanguard Video, to the family. On a personal note, it's no secret that I'm fanatic about quality, and we have found that Vanguard Video's encoders produce the best visual quality, at the lowest bit rates, with the highest performance levels. Together we will lead the video encoding market by far with unprecedented quality and performance."

Solutions that can maximize video quality per encoded bit rate are critical competitive features for content distributors who value visual quality while being sensitive to bandwidth availability on the network. For OTTs, the solution will enable users to stay below newly-imposed ISP data caps, while still enjoying full HD content on connected devices.

"We are privileged to be joining forces with Beamr," said Irena Terterov, Founder & CEO of Vanguard Video. "We are confident in the value this transaction will bring to the industry while enabling customers of both companies to strengthen their competitive position and secure their consumers' loyalty."

About Beamr

Beamr is the global leader in media optimization solutions, powering some of the world's top web publishers, social networks and media companies. Beamr offers a patent-pending perceptual video optimizer, which reduces the bitrate of H.264 and HEVC streams by up to 50%, preserving their full resolution and quality. By reducing video bit rates, Beamr enables content and service providers to distribute exceptionally high-quality video, with faster downloads and smoother streaming on bandwidth constrained connections. For more information visit www.beamr.com.

About Vanguard Video

Vanguard Video is a supplier of professional, broadcast-quality HEVC and H.264 codec technologies to top-tier customers around the world. With rich codec expertise, unparalleled performance/quality, and world class support and integration services, Vanguard Video has helped its customers capitalize on many first to market opportunities by pioneering advanced compression technologies including the release of the world's first commercially deployed HEVC service. Vanguard Video technologies support a broad range of platforms including x86, ARM, and OpenCL acceleration for GPUs. For more information, visit www.vanguardvideo.com.

Juniper acquires networking company BTI Systems

From our colleague Jordan Novet - January 26, 2016 -- Juniper Networks, a major player in the world of data center networking hardware, announced today that it has acquired BTI Systems, a company with hardware and software-defined networking (SDN) tools. Terms of the deal weren't disclosed.

BTI specializes in cloud and metro networking specifically to move content to and from multiple data centers within close geographical area, such as a city.

"We expect the acquisition will allow Juniper to accelerate the delivery of open and automated packet optical transport solutions that integrate with our NorthStar Controller and include network management features that enable end-to-end provisioning of new services," Juniper EVP & General Manager Jonathan Davidson wrote in a blog post.

The deal could help Juniper compete more with Cisco and Arista, especially when it comes to the service provider market. In 2012 Juniper acquired SDN startup Contrail for \$176 million.

Founded in 2000 and based in Ottawa, Canada, BTI has raised \$60 million in funding, according to the Boston Business Journal. Investors include Bain Capital Ventures, BDC, Covington Capital, GrowthWorks, Export Development Canada (EDC), Fujitsu Network Communications, and Kodiak Venture Partners.

BTI's website says the company had 380 customers, including Equinix, Interxion, Rackspace, and Vkontakte. TCW / e2mos (Daniel Dierickx) met BTI at the AdvancedTCA Summit in California in 2011

KT, SKT, DoCoMo, Verizon form 5G trial specification alliance

March 23, 2016 -- South Korea's KT and SK Telecom, Japan's NTT DoCoMo and US-based Verizon have formed a new global initiative to develop a common 5G trial specification.

The new 5G Open Trial Specification Alliance plans to develop a specification that can serve as a common, extendable platform for various types of 5G trial activities around the world, with a focus on 5G radio interface trial activities.

The operators are already co-ordinating on trial activity, with several technical trials planned for 2016-2018.

Besides the founders the alliance will seek to attract a variety of different industry partners, including other operators, network, chipset and device vendors and test equipment vendors. Several of the founding operators' key suppliers are already involved.

Announcing the alliance, the operators said the trial specification is not intended to limit ongoing standardization discussions happening within the 3GPP.

"Rather its objective is to provide a common trial platform where different technology components can be trialed and evaluated in order to provide a better understanding of the value and performance of different 5G technologies," the operators said in a statement.

"This can provide valuable input in the upcoming 3GPP discussions, by complementing simulation studies with real data from different trial deployments." The trial specification will cover multiple spectrum bands, both above and below 6-GHz. More from telecomasia [Click Here](#)

Telstra, Singtel agree to build Perth-Singapore cable

From our colleague Dylan Bushell-Embling - March 31, 2016 - telecomasia.net

Singtel, Australia's Telstra and SubPartners have jointly entered an agreement to build a new subsea cable linking Australia and Singapore.

The new APX-West cable will run between Perth on the west coast of Australia to Singapore. The two fiber pair cable will have a minimum design capacity of 10Tbps.

Construction of the 4,500km cable is expected to commence at the end of July and scheduled for completion in 2018.

APX-West will serve as an alternative to the SEA-ME-WE 3, the current data bridge between Singapore and Perth, and will help expand data connectivity and capacity between Singapore and Australia.

"The APX-West cable will be a new data superhighway to expand data connectivity and capacity between Singapore and Australia, providing network redundancy and the lowest latency from Australia to Southeast Asia, the Middle East and Europe," Singtel group enterprise VP for carrier services Ooi Seng Keat said.

"With these capabilities, the Singtel Group, including Optus, can meet customers' growing data requirements for bandwidth-intensive applications such as unified communications, enterprise data exchange, internet TV and online gaming." Telstra is Australia's largest operator by revenue, and Singtel operates Optus, Telstra's main rival.

SK Telecom, Samsung complete 5G field trial

From our colleague Dylan Bushell-Embling - April 01, 2016 - telecomasia.net

SK Telecom announced it has completed a field trial for its 5G system over 28-GHz millimeter-wave frequencies in an outdoor environment.

In collaboration with Samsung, the company tested 5G millimeter wave technologies including transmitter, receiver and antenna technologies.

The companies also used the trial to test 3D beamforming, the key 5G technology involving compensating for radio propagation loss over higher frequency bands by steering antenna beams in both horizontal and vertical technologies.

SK Telecom and Samsung built the millimeter wave 5G system used for the test at the end of August last year, and have been conducting field tests using outdoor 5G base stations since October.

SK Telecom said the results will help with its efforts to conduct preparation work for 5G, including plans to build 5G pilot networks within the end of the year.

"This 5G field trial is one of the key milestones for the world's first 5G commercialization," Samsung Electronics head of communications research for mobile Cheun Kyung-woon said.

SK Telecom, Deutsche Telekom team on 5G, IoT and media platform

SK Telecom and Deutsche Telekom have forged a technology development partnership covering services, IoT and development of 5G standards.

The partnership, aims to seek new growth opportunities in Asian and European markets.

Under the partnership, SK Telecom and Deutsche Telekom will work together to develop standardized technologies including SDDC (Software-Defined Data Center) and 5G enabling technologies.

In the area of 5G R&D, the two companies will pay particular attention to key 5G technologies such as network slicing and mobile edge computing.

SK Telecom and Deutsche Telekom will also make joint efforts to expand markets for their solutions and products and services.

The two companies will conduct a feasibility test covering the potential commercialization of a cloud streaming product provided by SK Telecom's subsidiary Entrix. They aim to launch the product in Deutsche Telekom's footprint by the second quarter of 2016.

The move will establish a beachhead for the South Korean operator to expand sales of the product in Europe, the companies said in a joint statement.

Moreover, the two companies have agreed to introduce SK Telecom's pico beamer to Germany in the second quarter of 2016 and then to other countries in Europe. They also agreed to launch Deutsche Telekom's in-car Wi-Fi solution in the Korean market.

SK Telecom and Deutsche Telekom will also cooperate in the international roaming service area, including quality improvements, signature of Service Level Agreements and pursuit of LTE based roaming services.

They will combine their efforts to investigate smart city solutions, collaborating in IoT to develop innovative services in an urban setting. **More:** Fiona Chau - February 24, 2016 - telecomasia.net [Click Here](#)



Cisco Completes Jasper Acquisition for \$1.4bn Simplifying IoT for Enterprises and Service Providers

SAN JOSE, Calif. — March 22, 2016, Cisco completed its acquisition of Jasper, a privately-held company based in Santa Clara, CA. Jasper's industry-leading cloud-based Internet of Things (IoT) service platform enables companies of all sizes to rapidly and cost-effectively launch, manage and monetize IoT services on a global scale.

Digitization is transforming the world. Cisco believes in a world where everything intelligent will be connected. IoT is a business imperative but implementation can be complex. Cisco is a leading provider of IoT connectivity, security and analytics with thousands of customers and proven use cases. With the acquisition of Jasper, we are moving up the stack to deliver a complete portfolio that simplifies the launch, management and monetization of IoT.

Jasper will become the IoT Cloud Business Unit, under SVP/GM Rowan Trollope, IoT and Applications. Jasper's IoT service platform allows enterprises to connect their devices – from cars to jet engines to implanted pacemakers – over the cellular networks of top global service providers, and then manage and monetize IoT services. Companies can deliver global IoT services across multiple service providers through Jasper's cloud-based platform. Cisco and Jasper share the same vision for accelerating IoT adoption and building a complete IoT solution.

Together, Jasper and Cisco will work closely with enterprises and global service providers to manage and drive a wide range of connected devices and IoT services that deliver a predictable recurring revenue business model. Cisco will continue to build upon Jasper's IoT service platform and add new services including advanced IoT security and analytics solutions to better manage device usage.

Jasper has partnered with 27 global service provider groups, representing more than 100 mobile networks worldwide to deliver IoT services in over 100 countries today. It has a proven IoT service platform providing connectivity over cellular to over 3500 enterprises.

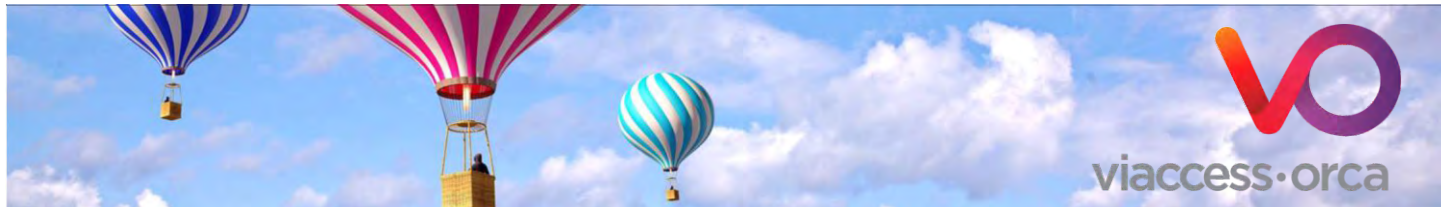
Acquisitions and investments remain a key part of Cisco's build, buy, partner, and integrate strategy. IoT is a critical component of Cisco's priorities and imperative to the company's overall strategy to be the number one IT company.



The TV Industry in 2016 — The Increasing Speed of the Cloud

The broadcast industry had to adapt to many changes in recent years as it has increasingly embraced IT technologies, but only few had the degree of impact that the cloud is currently having. This is the word 'change' written in neon capital letters a mile high; a fundamental change at all levels of business, production and distribution that enables Netflix CEO, Reed Hastings, to extend the company's service to 130 countries — including India with its billion plus people — while making a speech at CES.

Of course, the structural shift that the cloud is bringing is not limited to broadcast, and the wider figures are fairly astonishing. In 2015, 33% of organisations delivered 60% or more of their technology via the cloud. By next year that will be more than 62% of them. And in the same period the combined Software as a Service and Infrastructure as a Service markets will have risen from a \$72bn worth to one of \$111bn.



But the impact of the cloud has a special resonance in our industry. For pay-TV operators and the wider broadcast market, leveraging its power (and being able to scale quickly and at minimal cost in particular) helps square several current circles that would otherwise demand significant investment to remain competitive in a shifting marketplace.

Accenture has listed three of the current issues facing the industry as follows:

1. Consumers are demanding more choice, which in turn requires more computing power and resources than traditional broadcasting has ever had to manage.
2. An accelerating proliferation of devices and channels necessitates more flexible business models to serve a changing media landscape.
3. There are more Time to Market pressures as consumers demand rapid evolution of services and expansion of choice.

All this, of course, leads to increased cost pressures on technology sourcing and operations. In another report from the company, *The Future of Broadcasting V: The Search for Fundamental Growth*, accenture says that: "The widening gap between future value and current value makes the search for fundamental growth increasingly pressing for broadcasters." **Time is increasingly of the essence. Fortunately, time is one of the factors most in the cloud's favour.**

The Growing Importance of Time to Market

Time to Market (TTM) varies across industries and, within them, depending on the nature of the product being developed. New pharmaceutical drugs, for example, can have a TTM measured in decades once rigorous testing is factored in, while producing a totally new car from scratch is much slower than introducing an iterative model that builds on previous technologies.

The key is measuring an organisation's TTM in relation to its direct competitors, and it is here where a combination of the cloud and the rise of OTT and TV Everywhere have completely rewritten the rules of the game for broadcasters.

Things are already getting faster. Last year, VO worked with seven other vendors to build and launch 'Telekom TV', a new IPTV and OTT multiscreen service for Telekom Romania that included live, VOD and Network Recording. Working as Systems Integrator on the project and with much of our technology at the heart of it, we completed it in five months. This is a world record we broke for an on-premise IPTV/OTT deployment. We look forward to see how the cloud can make that even faster.

In a competitive landscape set against a backdrop of cord-cutting and high churn levels accelerated TTM is highly significant. One of the main opportunities for growth for broadcasters that accenture identifies is service differentiation, stating that "broadcasters need to develop a multitude of heavily tailored offerings to meet customers' needs and their willingness to pay." And if your rivals can bring a new service to market in under half a year, that means that the genie is out of the bottle and there is effectively a new arms race underway, with TTM one of the most significant factors in a successful deployment.

The cloud enables operators to launch new services quickly and easily. So what if many of the ins and outs of the process could be boiled down to simply uploading your content and then letting a third party do all the heavy lifting in the cloud. What if you could manage everything about your new channel, content, services, customers, devices and recommendations, from a single pane of glass? What if you could genuinely build and launch new services in a few clicks?



January 24, 2016

By: Efrat Fenigson

Senior Director of Marketing Communications

Viaccess-Orca (Orange Group)

UniversCiné creates VoD platform supported by Unified Streaming

Amsterdam, THE NETHERLANDS – 21th of January 2016

UniversCiné, French independent film platform, has selected Unified Streaming, leading provider of cross-platform video-streaming technologies, to create a valuable platform with the intention to transmit and broadcast cinematographic culture. Viewers can watch more than 4000 independent films ranging from classics to contemporary success of independent cinema

Founded in France in 2001, UniversCiné is an initiative of independent film producers and –distributors. Their initial goal was to raise attention for independent film through a VoD service offering the latest titles, classics and less well-known films. As well as some directors' interviews, articles, reviews, factsheets and festival information in order to enrich the users' experience.

"A key strategic focus at UniversCiné is to use advanced technologies to be future proof and offer our customers video anywhere, anytime." says Benjamin Henseler-Campana, CTO of UniversCiné. "There are various advantages like: no need for re-packaging or re-encoding, no need for extra storage and quick time-to-market with which we are ready to compete in today's fast moving OTT industry."

To be able to provide their viewers with the best quality, UniversCiné selected Unified Streaming's software because it provides advanced functionality to do on-the-fly packaging to all formats and platforms including DRM protection. Even in HD, if needed. So it detects on what device or platform you are watching and it searches the highest bitrate, so you will always get the best quality and speed possible. To address older and some android devices, progressive download of MP4 can be selected, making it possible to start watching before the download is completed. And because it all happens on-the-fly, it eliminates massive storage needs. Now you just need one file, unlike before.

"UniversCiné is a great reference and shows how our software can be used for creating an efficient and feature rich video-on-demand platform." says Simon Westbroek, VP Global Sales at Unified Streaming. "An important requirement for UniversCiné is offering viewers: download-to-own. Unified Origin makes it possible to stream from a single file all adaptive bitrate formats including the format required for download-to-one."

About Le Meilleur du Cinéma - UniversCine

The LMC/UniversCiné company was founded in 2001 by 34 independent film producers, sales agents and distributors, who decided to develop a common approach to Video on Demand publishing and distribution, enabling rights holders to control the way their films are presented on digital media.

About Unified Streaming

Unified Streaming is a leading provider of cross-platform video streaming technologies. Dedicated to help companies to create and execute smart video streaming technologies. Our products are in operation around the world with customers ranging from broadcast networks and online content distributors to small companies and webcasters. The ease of use and reliability of our solutions allow customers to shorten their time-to-market. Our solutions fit into existing frameworks (Apache, IIS, Lighttpd, Nginx) thus allowing for greater return on existing investment and reducing delivery cost significantly. Streaming from one encode simultaneously to multiple players and devices boosts time to market and reaches the broadest audience possible.

UHD Alliance Defines Premium Home Entertainment Experience

The logo for the UHD Alliance, featuring the text "UHD" in a large, bold, blue font above the word "ALLIANCE" in a smaller, bold, black font. A horizontal line is positioned between the two words.

Unveils Consumer-Facing "ULTRA HD PREMIUM" Logo and Begins Certification, Licensing Establishes First Cross-Industry-Developed Quality Criteria for HDR across Displays, Content and Distribution

LAS VEGAS Jan 04,2016--Enjoying a premium, full-featured Ultra High Definition in-home experience has been simplified for consumers as the UHD Alliance (UHDA), the inter-industry group charged with fostering the Ultra HD ecosystem and promoting the benefits of Ultra HD entertainment technology, today unveiled a consumer-facing logo to identify devices, content and services capable of delivering a premium experience to an exploding Ultra HD market that is expected to grow eightfold by 2019. UHDA also announced the start licensing of its ULTRA HD PREMIUM logo.

"The diverse group of UHDA companies agreed that to realize the full potential of Ultra HD the specs need to go beyond resolution and address enhancements like HDR, expanded color and ultimately even immersive audio. Consumer testing confirmed this"

ABOUT THE UHD ALLIANCE:

The UHD Alliance (UHDA), comprising more than 35 member companies, is a global coalition of leading film studios, consumer electronics manufacturers, content distributors and technology companies aligned to foster the creation of an ecosystem that fully realizes and promotes the next generation premium in-home entertainment platform. Key characteristics of a robust next generation experience should offer 4K resolution as well as a mix of other features that include high dynamic range, wide color gamut, high frame rate and immersive audio, among other features. UHDA Board members are executives from: The DIRECTV Group Inc, Dolby Laboratories, LG Electronics, Netflix, Panasonic Corporation, Samsung Electronics, Sony Corporation, Technicolor, The Walt Disney Studios, Twentieth Century Fox, Universal Pictures and Warner Bros. Entertainment. To learn more about the UHD Alliance, please visit: www.uhdalliance.org

Akamai Opens 'Scrubbing Centre' in Sydney to Combat Increasingly Sophisticated DDoS Attacks

Sydney, Australia | March 01, 2016

Akamai Technologies, Inc. (NASDAQ: AKAM), a global leader in content delivery network (CDN) services, today announced the opening of a new, state-of-the-art data centre in Sydney, Australia, as part of its global expansion strategy. Fueled by the increasing sophistication of distributed denial of service (DDoS) attacks, the company's latest 'scrubbing centre' leverages a cloud-based approach to mitigate threats without causing significant business disruption.

Part of Akamai's DDoS fighting strategy, these globally distributed scrubbing centres essentially analyse incoming traffic, identify threats and remove malicious activities with minimal downtime for the end user or the network. Hence, when a DDoS attack against a client website is detected, all incoming site traffic is rerouted to one or more of Akamai's global data centres. Malicious traffic is then "scrubbed" before the remaining clean traffic is routed back to the client's network.

"With an increased focus on end-user experience, application owners can no longer afford to invest in security solutions that compromise performance. Extending our global DDoS mitigation network with an Australian node enables Akamai to avoid the pitfalls of global latency and deliver a local user experience, whilst defending against attacks," said Adam Riley, Regional Manager, ANZ, at Akamai. "The new scrubbing centre will offer Akamai more advanced forensics on attack activity in Australia, which will enable continuous refinements to the protection of our local clients. In addition, customers will benefit from improved network performance and reduced latency."

According to Akamai's latest State of the Internet: Security Report published yesterday, the company saw a 149 per cent increase in total DDoS attacks globally for Q4 2015, compared to the same period in the previous year. The largest DDoS attack in Q4 2015 measured 309 Gbps, a sizeable jump in bandwidth from the largest attack in the previous quarter (149 Gbps).

Asia Pacific markets continue to be a major source of attack traffic, with China returning to the number one spot in Q4 2015 at 28 per cent, followed by Turkey (22%), the US (15%) and Korea (9%). While attack traffic from the UK, which was the largest source the previous quarter, did not decrease overall, traffic had increased sufficiently from the top three markets to affect the relative rankings.

"As DDoS attacks continue to increase in scale and complexity, Akamai also continuously looks at ways to expand our network capacity to ensure our clients are well-placed to defend against these threats," added Riley.

With the latest expansion, Akamai's global DDoS mitigation network now comprises scrubbing centres strategically located across North America, Europe and Asia Pacific.

About Akamai

As the global leader in Content Delivery Network (CDN) services, Akamai makes the Internet fast, reliable and secure for its customers. The company's advanced web performance, mobile performance, cloud security and media delivery solutions are revolutionizing how businesses optimize consumer, enterprise and entertainment experiences for any device, anywhere. To learn how Akamai solutions and its team of Internet experts are helping businesses move faster forward, please visit www.akamai.com



Key Events

ICML@NYC

International Conference
on Machine Learning
19-24 June 2016 - New York

[MORE](#)



**Best event in
North America
for the hosting and
cloud industry**

[MORE](#)

FREE CODE: US16B5F

**25-26 May 2016
Sheraton
Wild Horse Pass
Phoenix, Arizona**

M2M WORLD CONGRESS

**IoT, Big Data & Cloud
Wearables, Cars, mHealth
SmartCities & Homes**

REGISTER NOW

26-27 April 2016

London - UK

[MORE](#)



**Gigabit Copper
Brussels**

Le Plaza Hotel Brussels

08-March-2016

[MORE](#)

RAN Market: Small Cells, LTE & 5G to Grow over \$7B by 2020

It's Not All Doom Days Ahead for Global RAN Market, According to Dell'Oro Group

REDWOOD CITY, Calif., Feb. 9, 2016 /PRNewswire/ -- According to a newly published report by Dell'Oro Group, the trusted source for market information about the telecommunications, networks, and data center IT industries, it's not all doom days ahead for the global Radio Access Network (RAN) market as small cells, LTE, and 5G are expected to increase the growing segments of the market \$7 B by 2020.

"The RAN market clearly peaked in 2008 in revenue terms and the overall RAN outlook consists of declining revenues. However, we remain extremely optimistic about the role the RAN network will play supporting the on-going digital transformation," said Stefan Pongratz, analyst at the Dell'Oro Group. "Constantly changing end-user requirements will drive carriers to enhance their mobile broadband networks using both LTE macro and small cells. At the same time, slowing carrier revenue growth will accelerate the need to identify new revenue streams and reduce cost; as a result this will accelerate the shift towards 5G. Strong growth in small cells, moderate growth in LTE, and initial commercial 5G deployments towards the end of the forecast period will undoubtedly create opportunities for both existing players and new entrants," continued Pongratz.

The report also highlights how the uptake of 5G will be far more rapid than 4G. For example, in the second year of commercial deployment, we predict 5G to be approximately twice the level of 4G.

About Dell'Oro Group

Dell'Oro Group is a market research firm that specializes in strategic competitive analysis in the telecommunications, networks, and data center IT markets. More www.delloro.com

Avago « finally » Completes Acquisition of Broadcom - \$17 billion

February 2nd, 2016 by Lyle Smith

The acquisition of Broadcom by Avago Technologies has finally been completed in accordance with Singapore law while subject to certain filings with the Office of the Secretary of State of California. The deal was originally announced last May in 2015 for \$17 billion in cash consideration and the economic equivalent of approximately 140 million Avago ordinary shares. Previously, Avago has had also acquired companies Emulex and LSI.

By combining the products and technology of each company, Avago will strive to be a leader in communications semiconductors. The company will assume the name of Broadcom Limited.

The last day of trading for ordinary shares of Avago and shares of Class A common stock of Broadcom Corporation on the NASDAQ Global Select Market occurred this past Friday on January 29, 2016. Broadcom adds that the company's ordinary shares will begin trading NASDAQ Global Select Market as of this morning.



Facebook to open-source AI hardware design Based on NVIDIA Tesla Accelerated Computing Platform and PCI-e

FAIR (Facebook Artificial Intelligence Research) has achieved noted advancements in the development of AI training hardware considered to be among the best in the world.

Although machine learning (ML) and artificial intelligence (AI) have been around for decades, most of the recent advances in these fields have been enabled by two trends: larger publicly available research data sets and the availability of more powerful computers — specifically ones powered by GPUs. Most of the major advances in these areas move forward in lockstep with our computational ability, as faster hardware and software allow us to explore deeper and more complex systems.

At Facebook, we've made great progress thus far with off-the-shelf infrastructure components and design. We've developed software that can read stories, answer questions about scenes, play games and even learn unspecified tasks through observing some examples.

Faster, more versatile, and efficient neural network training

Big Sur is our newest Open Rack-compatible hardware designed for AI computing at a large scale. In collaboration with partners, we've built Big Sur to incorporate eight high-performance GPUs of up to 300 watts each, with the flexibility to configure between multiple PCI-e topologies. **More** [Click Here](#)



See Facebook at ICML International Conference Machine Learning, New York, June 19-24, 2016 <http://icml.cc/2016/>