

CCTV Installs Lawo V_matrix Core

China Central Television (CCTV) has installed China's first full IP video mobile system for video production.

This premiere mobile studio project uses the Lawo V_matrix software-defined IP-Routing, Processing & Multi-Viewing Platform as its core technology infrastructure.

CCTV, in conjunction with Lawo China and video partner Acro-bright, worked in cooperation with China's large regional system integrator, Beijing Yutian, to achieve this success, the latest in a number of joint Lawo / CCTV installations which include HD / UHD OB vans, audio SCRs, and studios in CCTV's Beijing headquarters.

The UHD 4K designed mobile studio installation, originally planned to play



Lawo V_matrix core

a central role during the Summer Games 2020 broadcasts from Tokyo, began construction in January 2019 under the supervision of the CCTV Production Department.

The project's multiviewer design is based on three Lawo V_matrix systems using 19 C-100 core processing



CCTV IP mobile video production system packs

modules and 19 Virtual-Module installations of the Lawo vm-dmv, the world's first infinitely expandable true IP multiviewer. The overall installation integrates 12 Sony UHD camera channels and one EVS.

The IP network is of a spine-leaf topology employing Huawei switches for the infrastructure backbone, with two CE8850 switches for the redundantly-designed core and four CE6865 switches as leaves.

Masstech Appoints Real Image Media Solutions

Masstech has signed top Indian reseller Real Image Media Solutions as its representative in the country.

Real Image Media Solutions division was set-up in 1992 and is the Indian representative of several global entertainment technology players.

"Masstech Innovations has a stability of ownership and continuity of technology roadmap that is highly attractive to the Indian market," commented Real Image Business Head, Kanishka Tongya.

With a strong foothold in the entertainment industry, from feature films to broadcast and production houses, Real Image Media Solutions has already closed several high-profile deals involving Masstech technology including new installations at Times Network Noida, Times Network Mumbai, and Thanthi TV.

"We are delighted to be represented in a key market by such a major player and valued reseller," said George Kilpatrick, CEO Masstech Innovations. "This is especially important now as

MASSTECH

REAL IMAGE

kumulate
Hybrid cloud media & content management

the industry looks to embrace remote working as a response to the Covid-19 pandemic, and ensures that our award-winning product line continues to enable new workflows and drive the operational environments that will emerge."

As a long-term provider of best-of-breed technologies, Real Image chose to add Kumulate to their portfolio of products to enable them to offer customers a genuine next generation content management platform.

Dalet & Bitmovin Power Australian NRL Content

Dalet and Bitmovin have announced a new collaboration that improves preparation and accelerates delivery of OTT content for broadcasters, sports leagues and teams, brands, and other media-rich companies. The first organisation to take advantage of the new technology partnership is Australia's National Rugby League (the NRL). The workflow integration, which features the advanced media logistics of Dalet's Ooyala Flex Media Platform and Bitmovin's blazing fast encoder technology, provides the NRL with the flexibility and agility to fully optimize their OTT strategy. Deep integration through the Dalet and Bitmovin open APIs enables them to expand existing

offerings into new markets and geographies at scale; engage fans through multiple services such as VOD, apps and subscriptions; and augment revenue opportunities thanks to better visibility across their production and distribution operations.

"Dalet's Ooyala Flex Media Platform, deeply integrated with Bitmovin's encoding, player and analytics offerings, redefines the economics and the experience of OTT video distribution for brands like the National Rugby League," stated Stefan Lederer, CEO, Bitmovin. "Viewers will be delighted with higher quality and a more diverse



The NRL is one of Australia's most popular sports

range of content. Streaming costs are drastically lowered through better use of bandwidth. With greater transparency across the operations, media organisations are able to make smarter decisions about legacy and future content and video reach."

Densitron Appoints JAA Systems Malaysia

Densitron has appointed a new distributor to support the development of its Intelligent Display Systems (IDS) platform in Southeast Asia. Based in the Malaysian capital of Kuala Lumpur, JAA Systems (JAA.S) is a long-established supplier of audio, video, broadcast and IT solutions.



JAA.S will supply the IDS platform

The further development of the IDS platform in the broadcast market has been at the forefront of Densitron's global strategy since it purchased the technology from IPE in July 2019. To this end the company is continuing to build new technical partnerships, including an alliance with audio console manufacturer Calrec that saw an integration of IDS with Calrec's Brio12 small-format desk being showcased at InterBee 2019.

Under the direction of David Chan, JAA.S has a distinguished history of working with leading audio brands, including Calrec, Merging Technologies, Orban, Prodis etc. Now it will also serve as Densitron's first-ever distributor in Malaysia and, in particular, will support the further adoption of the IDS platform, which is already in use at the studios of public broadcaster Radio Televisyen Malaysia (RTM).

JAA.S General Manager David Chan, said: "With Malaysia's broadcast sector currently undergoing exciting creative and technological expansion, we are confident that IDS will resonate with operators in need of adaptable and intuitive broadcast display and control systems."

Reuben Such, Global Business Development Director for IDS at Densitron, commented: "We see Southeast Asia as a region of tremendous opportunity for Densitron and the IDS platform."

He added that the JAA.S team had the client connections, market knowledge and technological expertise to attract new customers for IDS.

Thai Parliament Votes for PlayBox Neo

PlayBox Neo has completed a high definition parliamentary broadcast playout system for the National Assembly of Thailand in Bangkok.

The new installation is a complete end-to-end solution including ProductionAirBox Neo, TitleBox Neo and CaptureBox Neo. PlayBox Neo partnered in the project with Thai system integrator Broadcast Audio Service Company Limited and Bangkok-based distributor Mahajak Development Company Limited.

"The Thai government required a solution that would be reliable, operator friendly, space-efficient and future-proof," comments Banjongsak Wonggawee, BASC Project Engineer. "This is a complete new-install which gives the production team full control over the entire workflow from ingest right through to transmission. PlayBox Neo was the logical choice on every count. It was also easy to integrate with third-party devices which is crucial in the design of any system. The system we recommended is based on six production servers.

"Three of these are configured to capture, schedule and transmit



Part of the production and playout control facility at the National Assembly of Thailand in Bangkok
Top Right: Banjongsak Wonggawee (BASC Project Engineer) and Lower Right: Nut Deesamer (PlayBox Neo Brand Director)

proceedings from the 500-seat Chandra voting chamber in the Thai Senate plus three for the Surian chamber in the House of Representatives."

"ProductionAirBox Neo provides all the tools needed for live production and playout in a fast-paced work environment," says Nut Deesamer, PlayBox Neo Brand Director, Thailand. "Combined with TitleBox Neo and CaptureBox Neo it allows graphics and rolling text to be created and manipulated inside the PlayBox Neo GUI, and all with practically zero

latency. This configuration is ideal for parliamentary television where operators don't have the comfort zone of a studio script. CaptureBox Neo allows content to be recorded from up to four video sources simultaneously. Ingested content is available for playback seconds after ingest commences. All captured video and audio can be monitored and controlled via a streamlined user interface. Audio levels can be monitored as loudness or true-peak displays and adjusted when required."

"We have partnered with many

clients in the parliamentary and wider government sectors over the years, mostly in Europe," adds PlayBox Neo CEO Pavlin Rahnev. "It is very pleasing to see our solutions selected for this important Thai Parliament project. Parliamentary TV operators require the same high standards of reliability and continuity as mainstream broadcasters in their selection of supporting products and services."

The new system was completed in Q2 2020, on time and within budget, followed by on-site operator training provided by PlayBox Neo and BASC. ■

Magna Systems Provides VLink for Fox Sports Australia

Tough times have called for innovative measures as Fox Sports Australia found when they had a requirement for remote intercom and talkback. For the solution they turned to Magna Systems & Engineering and the RTS VLink Virtual Communications system. Fox Sports Australia Broadcast Projects Engineer Mick Gergos explained: "We wanted a secure, simple-to-use and integrated solution facilitating access to our existing RTS matrix over standard internet connections.

"Our requirements included remote TB communications for key personnel in production, engineering and operations and we wanted to expand this in the future. So, we discussed our requirements with Lucas Bohm and Brett Campbell at Magna and they suggested the RTS VLink Virtual Communications system."

VLink is an IP-software multi-channel, multi-access communications solution that intelligently connects to RTS intercoms, creating the optimal fusion of hardware and software

capabilities. VLink is highly scalable to thousands of soft keypanel users, supports virtually an unlimited number of point-to-points and PLs, boasts LDAP integration, SNMP traps, AES encryption, and SIPREC recording.

Gergos said: "V-Link's licensing model allowed us to prove the solution with very little outlay, whilst providing generous future scalability. The user interface is extremely intuitive providing traditional talk and listen keys on a variety of platforms including Windows, Mac, Android and iOS. Best of all, V-Link's tight integration with RTS Trunkmaster ties both talkback systems into one unified platform."

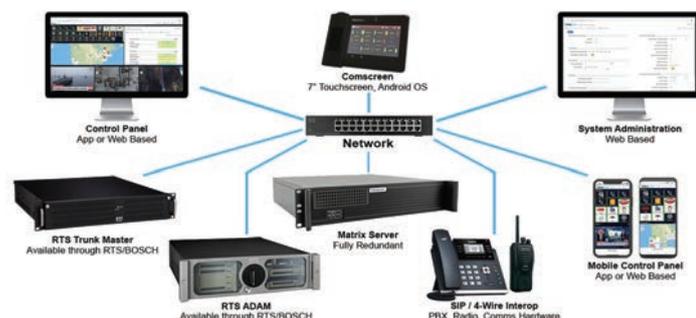
He added, "VLink's security is excellent as there's no exposure of our core RTS Matrix to the internet. The V-Link server provides the gateway and security. Baseband audio trunks between the two systems provide the necessary network isolation to satisfy our most paranoid IT geeks. Our Head



Fox Sports Australia's new RTS VLink Virtual Communications system

of Audio absolutely loves the system as not only is it so efficient but it's easy to setup too."

He concluded: "There's many IP audio platforms out there with PTT. For us however, the integration with RTS Trunkmaster was mandatory. VLink also gives Fox Sports the convenience of a TB in your pocket, on a desktop or on a laptop anywhere in the world and it also gives us more options to deal with mobile blackspots. Finally I have to mention Lucas Bohm, Brett Campbell and the Magna Systems team. It is every customer's right to harass their supplier for anything, anytime and for no good reason, but Lucas and Brett handle the attention with the upmost professionalism and for that they much be acknowledged and thanked. They really make all the difference." ■



VLink's "on-prem" communications solution (not implemented by Fox Sports)

CPI Completes Acquisition Of SATCOM Technologies



Communications & Power Industries (CPI) has successfully completed the purchase of SATCOM Technologies, the antenna systems business of General Dynamics Mission Systems, a business unit of General Dynamics.

The transaction was funded using a new committed debt financing.

The newly acquired business, which consists of approximately 1,000 employees, as well as facilities in the U.S., Europe and India, will be called CPI Satcom & Antenna Technologies Inc.

"As recent events have shown, communications play an indisputably vital and necessary part of modern life, and satellite communications capabilities are more critical than

ever. CPI remains committed to providing a broad selection of proven, reliable satellite communications products to meet the needs of commercial, government and military customers around the world, and this acquisition enables us to further strengthen our satcom product offering," said Bob Fickett, President and Chief Executive Officer of CPI.

The organisation's executive management team will remain in place and report to Andrew Ivers, CPI's Chief Operating Officer.

Owned and operated as a subsidiary of CPI, it will work closely with CPI's



CPI Satcom & Antenna Technologies

existing antenna systems businesses, CPI Malibu Division and Orbital Systems.

The portfolio of satcom antenna systems will include defence, communications and scientific applications.

Forsway Introduces Xtend Saga EMS

Forsway has introduced the Forsway Xtend Saga EMS, a high-performance DVB-S2 Modulator and IP Encapsulator featuring ACM (adaptive coding and modulation) and MPE (Multiprotocol Encapsulation) support, fully integrated with the Forsway Xtend complete satellite extension ecosystem.

EMS modulators and encapsulators are key in providing efficient transmission of satellite data. A key benefit for Forsway customers using the Saga modulator is a greatly simplified workflow. The modulator configuration is integrated into the Forsway Mimir NMS, enabling operations staff to seamlessly control their operations from one portal.

"We have already been working successfully with strategic satellite partners to supply modulators and IP encapsulators, thus the Xtend Saga EMS is an already proven solution," said Edvin Lindkvist, CTO at Forsway.

"With the introduction of our own product we can achieve a much tighter integration with the overall Forsway Xtend solution and see very positive benefits on both performance, pricing and efficiency for Forsway customers using the Xtend ecosystem."

The Forsway Xtend complete system can boost downlink capacity in rural areas from < 1 Mbps to > 40 Mbps, using satellite when needed, while on average using less than 20% satellite capacity compared to VSAT. Traffic is run over low-cost, but low latency and low-capacity (about 1 Mbps) ADSL or 3G/4G networks.

"Forsway sees the addition of its own EMS product as the optimal solution for further accelerating Xtend performance," added Lindkvist.

Calian SED Launches Decimator D4 Spectrum Analyser

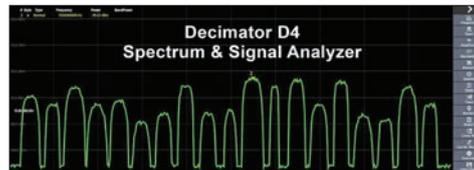
Calian SED has announced the availability of Decimator D4, the fourth-generation of the spectrum analyser product line designed to monitor radio frequency (RF) communications and detect signal issues. The new D4 hardware platform includes all the features of the previous generation, as well as numerous new capabilities.

A significant new feature of the Decimator D4 is signal analysis, complementing the spectrum analyser capabilities. Powered by a new signal processing engine, the D4 demodulates and decodes standard

satellite DVB-S/S2/S2X signals.

The resulting constellation display and signal characteristics allow a deeper inspection and analysis of the signals than a traditional spectrum display.

This new feature is particularly helpful to proactively identify issues in the network before they manifest as a failure. A new web user interface allows the Decimator D4 to be operated from all web browsers on all devices and platforms. The HTML5 application is compliant with the latest web standards and provides secure



Decimator D4 packs new features

user access to the D4. The addition of HTTPS support adds an extra layer of encryption and security between the user and Decimator for security sensitive installations.

A secure interface with encryption and authentication is also available through the application programming interface (API) used to integrate the Decimator within a network management system.

ENENSYS Updates TeamCast SmartGate S2/S2X

ENENSYS Technologies, a leading provider of media delivery solutions, has shared new developments for its TeamCast SmartGate S2/S2X.



TeamCast SmartGate S2/S2X

TeamCast SmartGate S2/S2X is a state-of-the-art satellite modulator dedicated to IP applications over satellite. It combines, in a 1U rack, both powerful IP/Ethernet encapsulation capabilities and Satellite modulation in full compliance with the DVB-S2 and DVB-S2X standards. This new version offers the possibility of encapsulating data streams in GSE format, thus offering more efficiency

in transmission compared to the MPE protocol.

"This feature has become essential given the ever increasing number of GSE-compatible satellite receivers," said Christophe Daniel, Satellite Product Line Manager & Product Owner at ENENSYS.

"TeamCast SmartGate is the ideal modulation product to migrate VSAT systems to DVB-S2X, GSE

and wideband - increasing the efficiency of the system."

Already easily integrated into a variety of Satellite IP systems (V-SAT, IoT, OTT, etc.), TeamCast SmartGate S2/S2X was based on MPE to insure compatibility with existing and deployed receiver.

Now, the new GSE compatibility brings a number of benefits to the TeamCast SmartGate S2/S2X.

In particular, it increases efficiency and improves our OTT over satellite services, which opens up the possibility of increasing the number of OTT channels on the same satellite carrier.



Edvin Lindkvist, CTO
FORSWAY

C-COM Integrates UHP Modem Over Galaxy Broadband

C-COM Satellite Systems, a world leading designer and manufacturer of commercial grade, auto-acquire mobile satellite antenna systems, has announced that it has successfully completed the integration of the UHP-200 modem with its iNetVu 8000 series antenna controllers.

The new modem is now fully compatible with all C-COM antenna systems using OpenAMIP interface.

Working closely with its long time Canadian reseller partner, Edmonton and Mississauga based Galaxy Broadband Communications, a leader in providing enterprise grade VSAT services to remote areas across Canada and the United States, C-COM's Manpack antenna systems (iNetVu(r) MP-80 & MP-100) were tested by Galaxy over their new e115 Ku Beam, which provides powerful coverage over northern North America and all three oceans.

The C-COM Manpacks auto-acquired the satellite in under 60 seconds and

delivered speeds equal to a fixed 1.2M system.

Galaxy Broadband also noted that only a 1dB drop off was seen when using a smaller 80cm dish, which is an impressive feature for those looking at efficiency gain.

The compatibility of the iNetVu Controllers with the UHP-200 router provides an advantage to C-COM partners who are currently using, or considering, the newest UHP modem. The UHP-200 has a compact size, consumes only 9W of power, can process 190,000 IP packets per second and deliver data transmission rates of up to 220 Mbps in each direction with DVBS2X or TDMA waveform.

C-COM's 'Best in Class' antenna controllers now offer interoperability with 14 different modem manufacturers and with more than 35 different models.

"The combination of high-quality service and support from Galaxy, and integrated hardware from

C-COM and UHP, provides the end customer with the highest quality solutions," said Leslie Klein, President & CEO of C-COM Satellite Systems, Inc.

"Our partnership with C-COM and Galaxy Broadband has a long history of innovation," said Vagan Shakhgildian, CEO of UHP. "Once again our companies were able to come up with an industry-leading product and service, which will deliver flexible and portable connectivity solutions to customers across North America," Shakhgildian added.

"This continued partnership with C-COM continues to benefit various industries across North America to deliver portable and mobile



C-COM UHP-200 Modem



iNetVu MP-100-MOT & iNetVu 8020 Controller

communication solutions," states Rick Hodgkinson, CEO and President of Galaxy Broadband Communications. "Our combined products and services enable business owners, employees, academia and Government agencies to access regions and projects with communication to assist in development, morale and safety," commented Hodgkinson.

C-COM mobile antennas with iNetVu controllers, compatible with the UHP-200 modems utilising Galaxy Broadband service, are available for immediate delivery. ■

Thaicom and CAT Satellite Joint Venture

Thaicom and CAT Telecom recently announced a satellite business joint venture in order to strengthen Thailand's telecommunications infrastructure and to support the growth of the digital economy industry and satellite industry.

The two companies are partnering to form a joint venture company called 'Nation Space and Technology Company Limited'. The joint venture has a registered capital of Baht 10 million. Thaicom holds a 75% stake, whereas CAT holds a 25% stake in the joint venture.

Anant Kaewruamvongs, Thaicom Chief Executive Officer, commented: "Thaicom has long experience and expertise in the satellite industry. Together with CAT's extensive know-how in providing digital solutions, the two companies will leverage advanced solutions and advanced satellite services for various applications and digital industries. We believe this strategic alliance between Thaicom



and CAT will lay the foundation for a long-term partnership and a sustainable growth of the country's telecommunication services."

Colonel Sanpachai Huvanandana, President of CAT Telecom, commented: "The establishment of this joint venture company will help to increase the opportunity to develop telecom services via Low Earth Orbit satellite systems in order to meet all kinds of future communication all over Thailand."

Thaicom and CAT noted that the development of technology services via LEO satellites will benefit everyone with access to high-speed internet services.

Gilat Ships Flagship VSAT Capricorn PLUS

Gilat Satellite Networks, a worldwide leader in satellite networking technology, solutions and services, has announced the availability of its flagship VSAT, Capricorn PLUS, which achieves half a gigabit of concurrent speeds.

The VSAT attains highest MF-TDMA channel rate of 100Mbps over a 30Msps channel enabling full satellite network resource utilization under any link conditions and service needs.

"Gilat is excited to release its outstanding VSAT, Capricorn PLUS, achieving speeds of 400/100Mbps while maintaining the integrity of high priority flows, such as cellular signalling, even in the most congested scenarios, to provide our customers with the required performance for the most demanding applications," said Alik Shimelmits, Chief Technology & Product Officer at Gilat. "Capricorn PLUS

enables support of a wide variety of applications requiring a range of different speed terminals, all sharing the same inbound network infrastructure."

Gilat's high-speed VSAT, Capricorn PLUS, is future-ready, built with support for Multi Access Edge Computing (MEC) infrastructure - enabling next generation edge services, such as video caching and IoT gateways.

In addition, Capricorn PLUS was designed to serve with maximum efficiency data intensive applications such as 5G backhauling, maritime and enterprise.



Capricorn PLUS offers high-speed VSAT