

# Enterprise sQ broadcast server systems that deliver

share our passion





# Enterprise sQ: broadcast server systems that deliver

Never has the broadcasting landscape been so competitive – and yet so full of opportunities for true media innovators: more ways to reach more people on more devices – in many more places. Quantel is the perfect partner to help you to fully realize these opportunities. We have enormous experience in helping forward-looking broadcasters around the world get great news and sports programming out across an array of delivery platforms incredibly quickly and efficiently.

## Proven success

Quantel's integrated production systems are in daily use across the globe with leading media organizations ranging from local broadcasters to supra-national operators. The BBC, ESPN, Fox, TV2 (Norway), TV3 (Malaysia), TVNZ, Botswana TV, NDR, Red Bee Media, NRK, BSKyB, Sky News Australia and Channel 7 are just a few of the organizations whose news and/or sports operations rely on Quantel Enterprise sQ and Newsbox.

## Right for the job

Quantel's solutions not only give a real edge in getting to the audience first; they are also totally scalable. Whatever the size of the operation or the scope of the need, Quantel can provide a perfect fit, easily upgradeable as needs grow. Every system is built on an ideal fusion of the latest IT technology with the realtime broadcast muscle upon which Quantel has made its name. Full HD production capability is designed and built-in to all systems, future-proofing the broadcaster's investment.

## Supremely usable

Quantel solutions are enterprise-wide and inclusive – giving interactive working to any and every desktop that needs it. The user interface has universally proved itself to be genuinely easy to learn and use, as well as being scalable to meet different users' individual requirements. It is readily accepted and quickly put into productive use across the whole organization.

## Totally integrated

Quantel systems also integrate fully with all major newsroom computer systems, automation, asset management and archive systems. Quantel's own Mission Media and Asset management system gives enhanced access to – and control of – media assets, and also provides dedicated, high-speed facilities for re-purposing material for the web, podcasts and handhelds.

## The complete solution

Whatever the requirement – getting news to viewers faster, empowering journalists, fully leveraging all the new distribution channels, increasing efficiency, saving money... Quantel has the technology and experience to engineer integrated news and sports production systems that not only meet every operational need from ingest to archive, but also add real value where it counts – to your bottom line.

“Only Quantel ticked all the boxes. Their system could do everything we needed – news, graphics, post, longform and promos – all within the same package.”

Carlo van Acker, Omroep Brabant, Holland



# Enterprise sQ: a partnership built on your needs

Quantel's Enterprise sQ solutions are providing a measurable competitive edge for broadcasters large and small around the world. While every system shares the same powerful, interactive workflow structure, each is also different – tailored to precisely meet individual workflow requirements. However short the deadline, Enterprise sQ can do just about anything you need.



Above: mediahouse, London

## Engaging with Quantel

We won't ask you to fit with us. Instead, we work closely with you to understand your needs, aspirations and constraints. First we listen, then we discuss, we analyze, we suggest and report. Then once we've agreed, we propose solutions for now and for the future – designed to evolve, expand and develop with the needs of your business.

## Experience counts

Whatever the challenge, we've probably done something similar before. So we do more than replace old with new – we take what's good and make it better. People joined as teams; tasks joined as workflow; technology joined as solutions.

"The Quantel server-based editing and post production platform has given us a strong and flexible platform for future expansion."

Richard Allingham, mediahouse, UK



## Flexibility

Enterprise sQ systems already come in as many shapes and sizes as we have customers. Whatever you want to do, our systems will fit in perfectly. Every Enterprise sQ solution is completely scalable, so can be configured to meet every individual operational and strategic need. Whether it's a single server system supporting just a few journalists and editors or a zoned system efficiently sharing media across buildings, towns or continents that's required, Enterprise sQ has the flexibility to deliver.

And you can carry the same editing interface out into the field with Marco, our software-only editor, enabling your staff to use familiar tools to edit stories in remote locations with speed and ease.

Only one thing remains constant with every Enterprise sQ system – uncompromised performance, whether supporting five or 500 users.

"It came down to the quality of the technology and our confidence in the company both for today and into the future. With a project of this scale and complexity, you are not only purchasing a system, you are also starting a relationship."

Geir Børdalen, NRK, Norway

## Training

A well-trained team is a successful team. We know that new skills, new technology and new workflows need careful handling. We'll work closely with you to design the training program you need. And we'll deliver it where and how you want it. Operators, engineers, managers – Quantel's Compass training covers every aspect of system operation, management and support. So when you go on air, your team is ready to deliver.

## Support

Your business is 24/7/52 and so is ours. Quantel QCare support is every bit as good as you think it should be. Assistance, diagnosis and spares. Anywhere, any time; you can rely on it.



# Multi-format: the way ahead

Broadcasters today need to service multiple media channels in many different formats with media and metadata acquired from an ever-increasing range of sources. And they have to do this against an increasingly competitive backdrop where the need to get to air fast – and looking good – has never been so great.



## Designed for the multi-media age

Enterprise sQ is new generation broadcast technology, designed from the ground up to be ready now for the multi-media, multi-format age. Video, files and metadata are handled seamlessly together in a totally integrated workflow.

## Fastest to air

Because Quantel has 30 years of experience working with broadcasters in mission-critical on-air environments, we know that broadcasters and their audiences can't and won't wait. So the open Quantel production environment is built upon the foundations of ultra-reliable, realtime broadcast hardware that simply delivers media on a next-frame basis in any required format, no matter what other demands are made on the system. That's why Quantel systems produce sparkling results with a flight time from ingest to air that is faster than anything else.

## UGC to HD

Everything from UGC (User Generated Content) to professional acquisition formats, together with their associated metadata, is immediately available for review and editing on all connected desktops. As soon as the work's complete, it's ready for multi-format delivery.

## All-out performance

Broadcast, podcasts, web, mobile devices – all are supported. Thanks to Quantel's unique FrameMagic technology, different copy-free versions for every format are easily and quickly produced; every delivery channel can have equal priority in the Quantel environment.

"Our speed to air has greatly increased and the system's ability to make all ingested material instantly available to multiple users massively increases our editing efficiency."

Datuk Kamarulzaman, TV3, Malaysia

"Now we can cut a breaking story and get it on air within minutes of getting it in house. That capability really gives us an edge."

Keith Nolan, WRCB, USA



# Partnerships: the total system approach

No broadcast production system is an island. Broadcasters need to select best of breed applications that meet their individual workflow needs perfectly; and they need to be assured that these will integrate seamlessly to deliver the performance they require to meet their workflow and business objectives.

That's why openness is designed into Quantel broadcast technology, and why Quantel systems support all industry standard protocols such as MOS, CORBA and MXF.

This means that Quantel systems can integrate fully with an enormous range of third party MAM, Automation, Newsroom, Production and Archive solutions, all field-proven in a massive variety of applications with broadcasters around the world.

The list of our current 50+ partners and partner applications can be found on our website at: [www.quantel.com/partners](http://www.quantel.com/partners)

Here are just a few real-world examples of Quantel's open partnership approach in action around the world:

## RTP, Portugal

Quantel – ENPS – Omnibus – Sony

RTP is the state broadcaster for Portugal and utilizes Quantel Enterprise sQ production systems for news, sports and general production. The news production system is closely integrated with Omnibus tools, which provide ingest, media management, playout and archive integration. Omnibus G3 tools provide comprehensive control of other video infrastructure such as the routing switcher and studio playout devices. RTP utilizes ENPS newsroom scripting systems, which are linked to Omnibus Columbus playout systems. All RTP production centres are linked to a central station archive comprising Sony archive systems.

## DIRECTV, USA

Quantel – Dixon Sports

DIRECTV, the USA's leading satellite television service provider, utilizes an Enterprise sQ HD production system for its Red Zone Channel. The Red Zone Channel delivers big plays and significant moments from NFL (football) games as they happen. The system is integrated with a Dixon Sports Computing Hillite system, which logs the action. Highlight packages are then edited together using sQ View and sQ Edit desktop applications, with craft editing on sQ Edit Plus. Record and playout are controlled by sQ Record and sQ Play applications.

## ARD-aktuell (NDR), Germany

Quantel – Annova Systems – S4M

ARD-aktuell produces the main nightly news for the German public TV network using Quantel Enterprise sQ systems controlled by German MAM provider – Solutions for Media (S4M). The system is configured with a high degree of redundancy whereby ingest, editing and playout is completely mirrored under control of the S4M asset management system. S4M also provides integration with the ARD network's national video data archive. The journalists' scripting system is provided by Annova Systems' OpenMedia newsroom system.

"I would work with Quantel again any time; we have and will continue to have a great relationship."

Geir Børdalen, NRK, Norway



### TV2, Norway

Quantel – Ardendo – iNews

TV2 relies on Quantel Enterprise sQ news production systems for its Bergen headquarters and Oslo production studio sites. Ardendo provides ingest and media asset management tools (ARDOME and DART) at both sites as well as managing a common data archive located in Bergen. TV2 uses Avid iNews journalist scripting and rundown management systems for the news bulletins transmitted on various channels. The Ardendo MAM tools are embedded into the Quantel desktop editors, which provide journalists with fast search and media retrieval facilities.

Above left: RTL, Luxembourg  
Above right: ARD, Germany

### RTL, Luxembourg

Quantel – Front Porch Digital – Norcom – SGT – StorageTek – Telestream

Quantel partner SGT provides key integration with a Quantel Enterprise sQ production system that is used for daily production of RTL news and magazine programmes. SGT's DBOS Device Controller is the key back office technology, providing realtime control of the various production tools used in the production workflow. It enables native integration of the MOS protocol and its HTML interface provides integration with the Norcom News NCPower NRCS. Front Porch Digital manages a large StorageTek archive, which stores both news and longform media (e.g. movies). Long GOP MPEG media is transcoded to i-frame media using Telestream Flip Factory applications.



### BBC Regions, UK

Quantel – ENPS – Front Porch Digital – IBIS

The BBC regional TV stations utilize Quantel Enterprise sQ systems for production of three daily news bulletins. IBIS media asset management tools – Server Load and Server Play – provide ingest and playout of media captured and edited in the Quantel servers. The Server Play product is linked via the MOS protocol to ENPS newsroom scripting system, allowing automation of the playout servers, character generator and other studio control room devices. Front Porch Digital DIVAWorks archive is integrated with the system, storing finished video media on a compact robotic data tape system.

### TV3, Malaysia

Quantel – Front Porch Digital – Omnibus – Spectra Logic

TV3 Malaysia produces all its news programming with a Quantel Enterprise sQ system, with 30+ journalists able to select shots and edit material directly from their desktops. The sQ system is fully integrated with the station's iNews newsroom computer system, as well as Omnibus Columbus automation, which controls ingest and playout. Front Porch Digital DIVAWorks asset management is also integrated with the system, with the archive itself based on Spectra Logic Library using SAIT-1 digital tape drives.



# Mission: holistic media and asset management

Mission provides a totally integrated media asset management facility for Enterprise sQ systems. Mission's holistic approach enables broadcasters to get the very most out of the Quantel workflow within news, sports and other fast-turnaround operations, maximizing the potential and value of every media asset. With Mission, asset management is a naturally integrated part of the production process.



## Productive

With Mission, everyone in the facility who needs to store, access and use media and metadata has all the tools they need at their fingertips. It all adds up to a naturally far more productive and creative production environment, with the kind of workflow that delivers on the full potential of every asset.

## Connected

Mission brings full asset management, search, retrieve and deploy capabilities to every connected desktop. Producer, director, librarian, journalist, editor, legal – with Mission, all get the media they need, when they need it and how they want it.

## Complete

Mission sits right across Quantel server systems and archives, providing an overarching media asset management layer that gives full access to all material held, both on and offline. Mission is tailor-made for the new media age, where UGC has to sit comfortably alongside professional file and video formats.

- Low cost, high performance MAM
- Archive to desktop in a single click
- Streamlines multi-platform delivery
- Enables you to get the most out of all your assets – media and metadata
- Empowers your people – better teamworking produces better results

## Mission Tracker

Instant access and two-way control of all media, both in the server and offline. Mission Tracker runs on all the operational workstations around the system, using familiar Quantel menus to search, display and drag & drop media assets and their associated metadata.

## Mission WebView

Web-based remote access and tracking of media assets. Using any standard web browser client, remote users have full search capabilities and access to all the media and metadata, including browse images.

## Mission Transfer

Mission Transfer is a sophisticated ingest and export tool that takes the pain out of scheduled operations – including transcoding – by performing them automatically, thanks to a wide range of advanced tools for managing the ingest of video and files.

## Mission Capture

An extension of Mission Transfer that takes all the rich metadata such as scripts, keyframes, location etc from incoming agency file feeds and automatically associates it with the media files.



### Mission Archive

Drives the customer's chosen disk or HSM (Hierarchical Storage Management) Archive solution to transfer media to and from the store for production use.

### Mission Store

For customers wanting to include an all-new archive hardware solution with the Mission system, Quantel has developed Mission Store, a combined disk and tape library offering a mix of disk and tape storage that can hold thousands of hours of media.

### Mission Central

Mission Central provides the system-wide MAM database and production access. Based on an industry standard SQL database, Mission Central not only holds all the metadata and browse proxies of all online and archive material, but also keyframes (selected reference frames and change points) and thumbnail pictures.



Any production changes to media made in the Quantel server environment are instantly reflected in the Mission database, and vice versa. The result is a system that lets users do their jobs to the full in the way they need to, without hindrance.

"The Quantel workflow and brilliant media handling enables us to do far more, much more quickly with the system than any of the competing offerings."

Peter de Vink, UBF, Holland



# Dino: inter-site workflow for digital news and sports

Dino opens up a new era of collaborative workflow possibilities for users of Enterprise sQ systems. Dino enables them to share media, metadata, resources and workflow between locations, allowing broadcasters with more than one site to maximize the use of media, systems and personnel. These sites could equally be in different buildings, cities, countries or continents – with Dino, distance is no object.

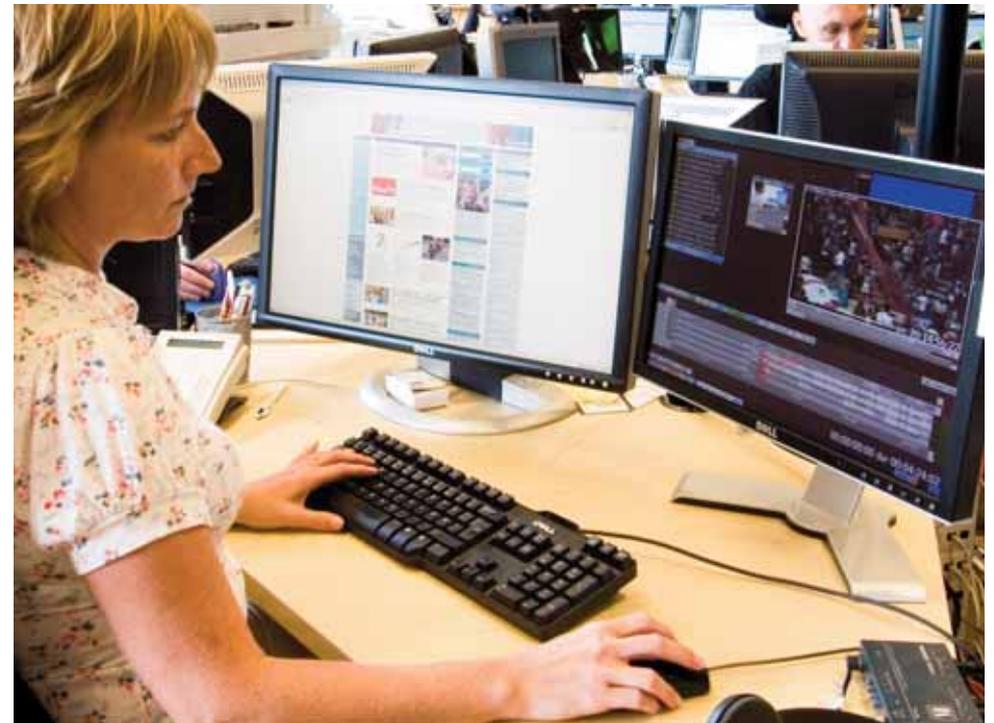
## Joining workflows

Dino doesn't just move content over the internet, it joins workflows. Dino is a solution that solves the problems of bandwidth, latency and availability that are inevitable over long distances. It achieves this using a combination of innovative transport protocols, bandwidth optimization and interruption-tolerant techniques that enable a fully operative workflow between two or more sites. That's great for business: people can work effectively, wherever they are, and assets can be accessed, re-purposed and re-published, wherever they are.

## New applications

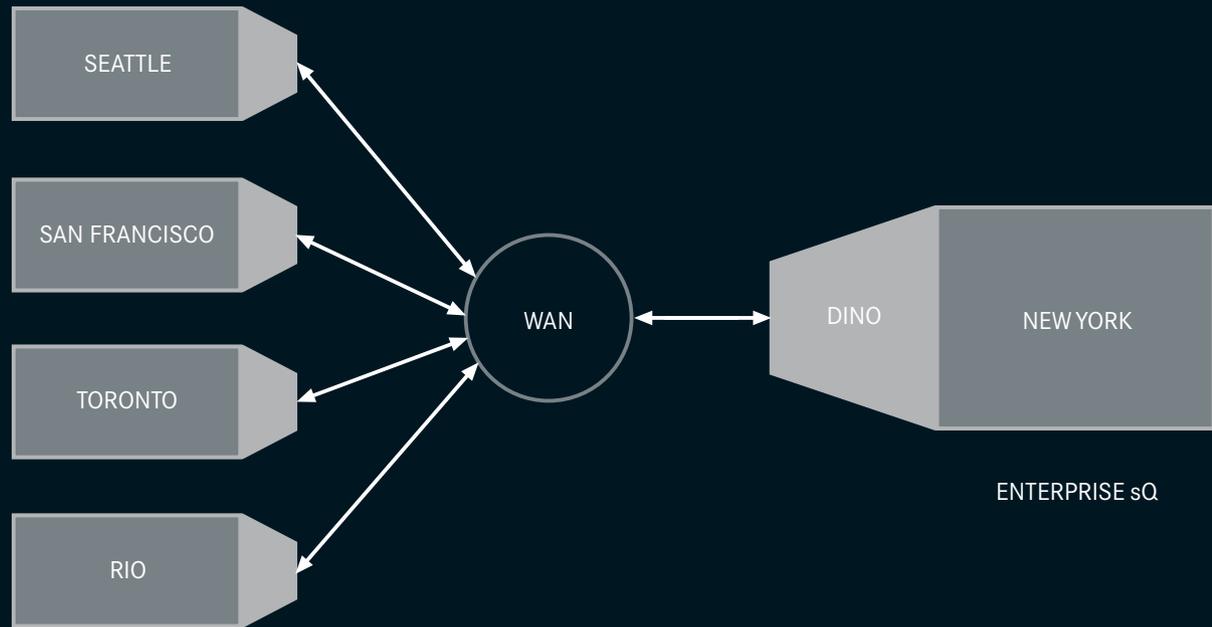
Dino is a natural extension of the Quantel desktop workflow that delivers far more performance out of a WAN than would be possible with any other architecture on the market. Dino opens up many new workflow possibilities for broadcasters:

- Sharing content between stations
- Sharing content between stations and a network hub
- Sharing between TV studios and temporary studios at major sports and other events
- Sharing studio content with home workers or travelling reporters
- Disaster recovery/business continuity – guaranteeing continuance of service even if one location goes down



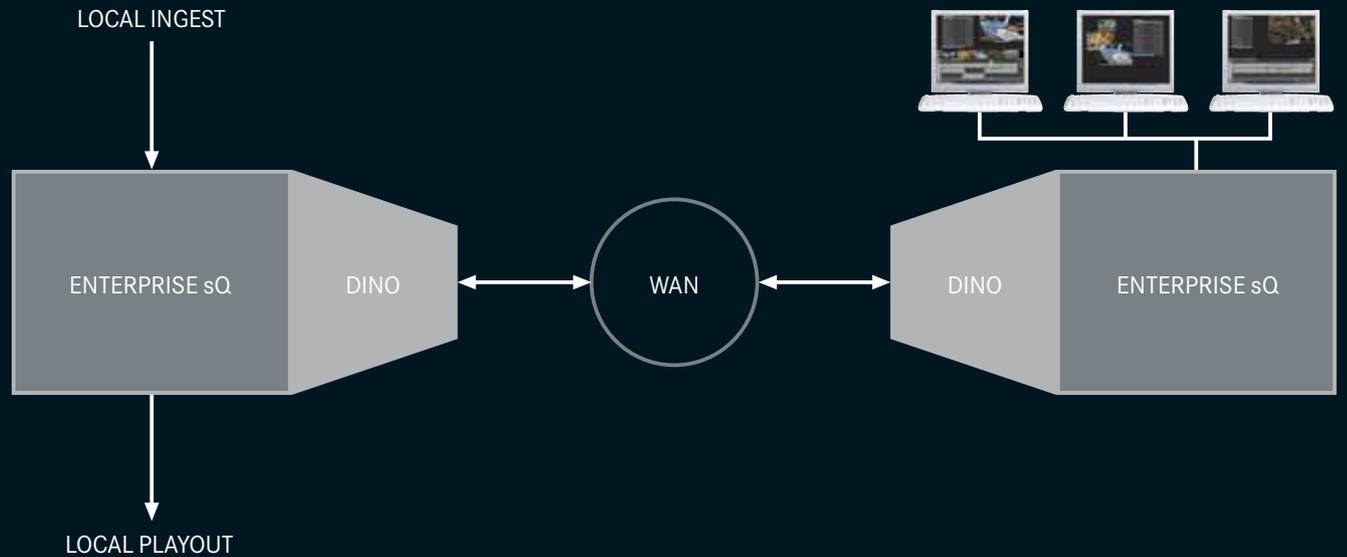
### Multi-site working

- Each location can browse and edit media from any other site
- Edits can be transferred to any site for playout or re-editing
- Pre-emptive transfers move media to where it is needed



### Split-site working

- Editors can browse and edit media ingested at the remote site
- Finished edits can be published to the remote site for playout



# The creative interface – the heart of Enterprise sQ

The enormous success of Enterprise sQ is partly due to its brilliant user interface, which has been designed from the ground up to meet the full range of broadcast needs. It gives users at every operational level within the broadcast facility fast and easy access to all stored media, and creative toolsets for reviewing and editing it that are perfectly matched to their individual needs and abilities.



## Scalable

The sQ user interface has been developed as a direct result of Quantel's many years of front line experience with server-based news production systems. It scales from simple desktop shot review and selection tools (sQ View) through powerful, fully-fledged journalist editing (sQ Cut and sQ Edit) and onto full-blown craft editing with the hardware-assisted sQ Edit Plus workstation. All share the same interface and fundamental toolset, but each level adds more capabilities suitable to the increased skill of the operator and the kind of work being undertaken.

## Easy to use

The interface is simple to understand and easy to use. A journalist with no previous editing experience can learn to cut a basic story with just one day's training. This ease of use allows broadcasters to move up to 90% of their editing requirements into the newsroom, putting journalists in control and freeing up craft editing resources for more creative work.

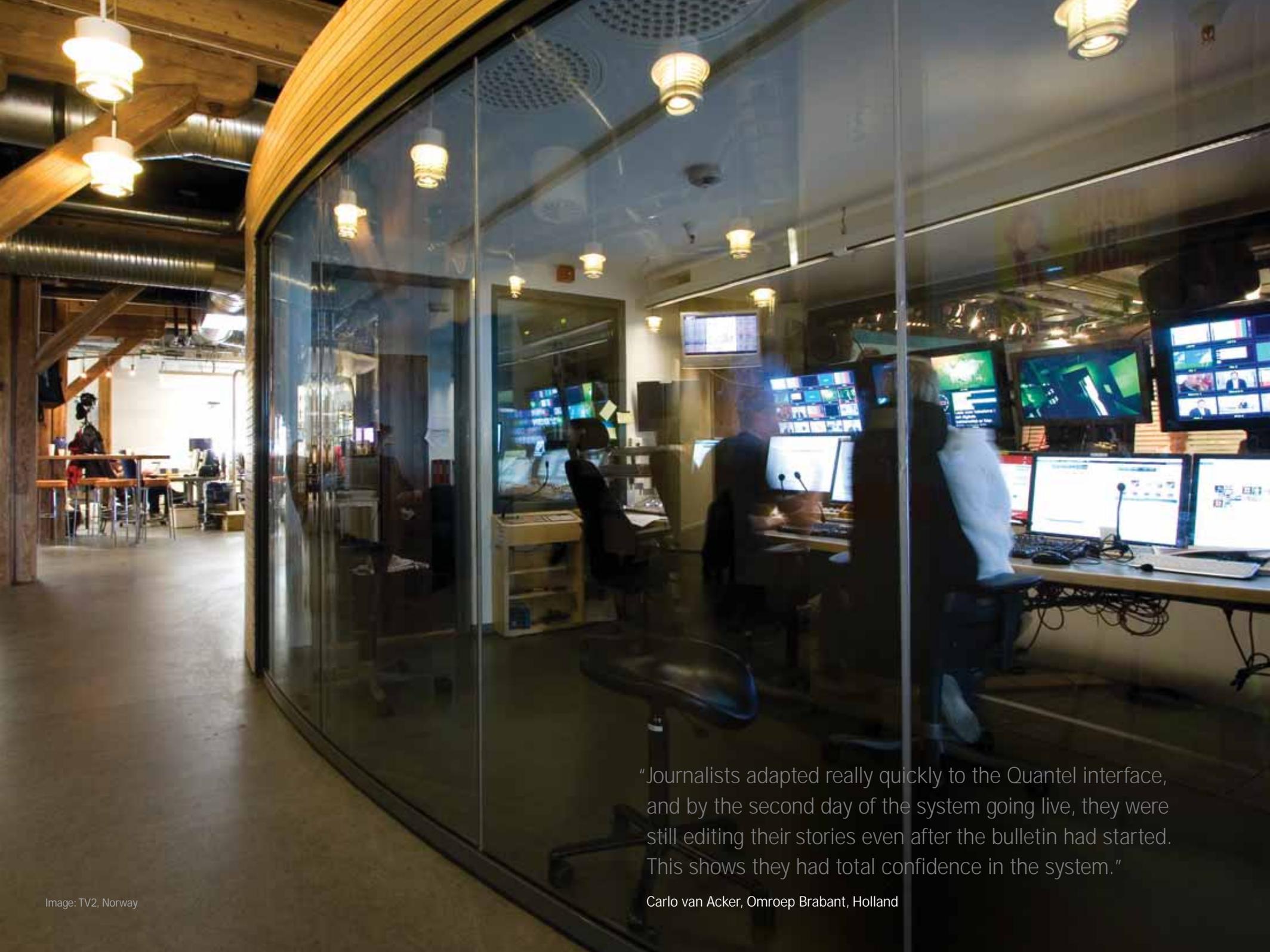
## Progressive

As competence is gained at each level, users frequently choose to move on to more sophisticated levels of operation, often becoming highly proficient editors in addition to their journalistic or other production skills. It all adds up to the kind of flexibility that broadcasters have dreamt of for many years, and is a win-win for everyone involved in the production process.

## Easy to learn

Quantel offers tailored training packages as part of every new system sale that are designed to get the broadcaster on-air with Quantel in the shortest possible time and with the maximum efficiency. Quantel has also launched a unique remote training package named Compass, which allows operators to be trained – and to practise their skills – on completely compatible software away from their day-to-day responsibilities.

"The interface is simple to understand and easy to use."



“Journalists adapted really quickly to the Quantel interface, and by the second day of the system going live, they were still editing their stories even after the bulletin had started. This shows they had total confidence in the system.”

# Enterprise sQ: choosing the right system for you

Enterprise sQ systems are infinitely configurable from a number of standard components, each developed to meet a specific requirement in the production process. As your needs develop and grow, so can your Quantel solution; all systems can be expanded and upgraded at any time.



## The sQ server

The sQ server is the ingest, editing and playout server at the heart of Enterprise sQ. sQ servers are completely configurable and totally scalable – supporting any number of dynamically switchable i/o ports from just two to literally hundreds; similarly, storage capacity can range from tens to thousands of hours. sQ servers support IMX, DV, DVCPRO and AVC-i formats. All have SD and HD capability built-in thanks to Quantel's Resolution Transparency technology, providing full-on HD performance now, or enabling the broadcaster to grow into HD when the need arises.

What is common to every sQ server configuration is their no-wait, next frame performance for multiple users and outputs under all loads and conditions. This is the kind of guaranteed performance that broadcasters demand, achieved by Quantel's unique mixture of IT and broadcast technologies.

sQ server's disk arrays have dual PSUs and keep working in the event of disk failure. Disks can be hot-swapped and rebuilds are automatic. FrameMagic technology means that defragmentation and consolidation are never required. This also means that sQ servers run at 100% even when fully loaded – there is never a performance drop-off.

"In 12 years with Quantel equipment we've never been 'off-air'. We invest in Quantel technology to provide our news professionals with the best that the industry has to offer."

Doug Loveridge, WRCB, USA



## ISA

ISA (Integrated Server Architecture) is the brains behind Quantel server systems, providing the totally integrated management that ensures every part of the system and all media are always perfectly synchronized.

ISA is pre-configured on three dedicated, rack-mounted PCs. Two of the PCs provide redundancy in the event of a failure and the third hosts Quantel's IMON monitoring package as well as the Licence Manager. IMON provides complete status monitoring for the entire system, while the Licence Manager enables floating licences for the editing applications, allowing considerable flexibility about where the software is installed and how it is used.

Above: TV2, Norway

## sQ Record

sQ Record controls recording of new material into the system. Each sQ Record offers complete control of up to four ingest ports. sQ Record can record from live feeds and includes RS422 control for recording from VTRs.

## sQ Play

sQ Play manages up to four channels of playout, with optional MOS download from newsroom computer systems.

## sQ View

Newsroom browsing, shot selection and review software. Its simple UI makes it fast and easy for anyone to find and use media. Shot selections and compilations put together on sQ View are instantly available with all their metadata on other editing workstations for viewing or refinement.



## sQ Cut

Intermediate software package that delivers everything sQ View does plus complete timeline editing and VO record. sQ Cut is the perfect replacement for the workhorse two machine edit suite. The Template option allows sophisticated graphics to be added without tying up a graphic designer.

## sQ Edit

sQ Edit is the top of the range software editor and has all the facilities of sQ Cut plus mix, wipe and custom transitions. A suite of quick fix tools solves everyday picture issues such as color balancing or masking out a face. sQ Edit includes Templating as standard and the Effects option adds full multi-layer compositing facilities. sQ Edit can also load material from XDCAM and P2.

## sQ Edit Plus HD

sQ Edit Plus HD is the hardware assisted editor for sophisticated craft editing work. Supplied fully configured, sQ Edit Plus HD offers the best performance for working with HD. sQ Edit Plus HD includes the complete editing toolset including Templating and Effects. sQ Edit Plus HD also supports ingest from SD or HD video and from P2 and XDCAM.

## Marco

Marco allows the same easy-to-use editing interface utilized on sQ Edit to hit the road. Designed to run on standard laptops, Marco allows editors to be just as productive on the road as they are at base.



# The technology

Enterprise sQ systems incorporate several unique Quantel technologies. It's these technologies that underpin the awesome workflow, scalability and power of Enterprise sQ.



## ISA (Integrated Server Architecture)

ISA delivers totally scalable operation, handling everything from single server set-ups to multiple server production systems. ISA automatically manages everything that happens within the Quantel environment, managing multiple simultaneous operations such as ingest, viewing, editing and playout.

No matter how many individual server 'building blocks' a system comprises, with ISA the entire system performs as if it were just a single server, giving wait-free operation and simplifying the media management task. ISA delivers:

- Single library across the entire system, making finding clips fast and simple
- Ultra-efficient operation, minimizing time to air and eliminating the need for separate ingest and playout servers
- Automatic creation and linking of browse and broadcast media, allowing edits made on the desktop to play instantly to air utilizing high quality broadcast media

## FrameMagic

FrameMagic is the integral filing system that manages how media is stored. FrameMagic is a vital factor in the power and flexibility of Quantel systems. It manages frames not clips and means:

- Material can never be deleted if it is in use by another user
- Material that is not being used can always be deleted without wasting time having to consolidate
- Time to air is minimized as every frame is available as soon as it has been ingested
- Disks are used more efficiently as frames are only stored once irrespective of how many times they are used – saving time and money

## Resolution Transparency

Enterprise sQ systems handle both SD and HD without limitations. With Resolution Transparency:

- The server ingests and stores both SD and HD media
- On playout, clips are converted on the fly to the correct SD or HD output format
- The server handles aspect ratio conversion between 4:3 SD and 16:9 HD automatically
- SD and HD clips can be mixed on edit timelines
- Journalists can work on shots without worrying about SD/HD issues

# Quantel users

Quantel integrated production systems are installed with broadcasters and production houses around the world. Here is a partial list of our users around the world at October 2008. New installations are being added at a rate of around one per week.

A-Medialynx	Berlin, Germany	Gehua Television	Beijing, China	Sapporo TV	Sapporo, Japan
ARD Hauptstadt Studio	Berlin, Germany	Goal TV	Kuala Lumpur, Malaysia	SBC	Nagano, Japan
Astro AABC	Kuala Lumpur, Malaysia	Hong Kong Jockey Club	Hong Kong, China	SBS	Seoul, Korea
Astro Cyberjaya	Kuala Lumpur, Malaysia	Hunan TV	Changsha, China	Seven Network	Adelaide, Australia
Astro Post Production	Kuala Lumpur, Malaysia	Hyundai Home Shopping	Seoul, Korea	Seven Network	Brisbane, Australia
Até ao Fim do Mundo	Lisbon, Portugal	ITN	London, UK	Seven Network	Canberra, Australia
BBC	Belfast, UK	J-Sports Broadcasting	Tokyo, Japan	Seven Network	Melbourne, Australia
BBC	Birmingham, UK	KBTX	Bryan, USA	Seven Network	Perth, Australia
BBC	Bristol, UK	KOIN-TV	Portland, USA	Seven Network	Sydney, Australia
BBC	Hull, UK	KSNT-TV	Topeka, USA	Sky News	Sydney, Australia
BBC	Kent, UK	KMOV	St Louis, USA	Socater	Gran Canaria, Spain
BBC	Leeds, UK	KRGV	Weslaco, USA	Socater	Tenerife, Spain
BBC	Manchester, UK	KSNW-TV	Wichita, USA	Sport TV	Lisbon, Portugal
BBC	Millbank, London, UK	KWTX	Waco, USA	SSVC	Gerrards Cross, UK
BBC	Newcastle, UK	MBC	Seoul, Korea	TEAM	Washington, USA
BBC	Norwich, UK	Mediacorp Studios	Singapore	Telemadrid	Madrid, Spain
BBC	Nottingham, UK	mediahouse	London, UK	TPC	Zurich, Switzerland
BBC	Oxford, UK	NASCAR	Charlotte, USA	TV2	Bergen, Norway
BBC	Plymouth, UK	Naval Media Center	Washington, USA	TV2	Oslo, Norway
BBC	Southampton, UK	NDR	Hamburg, Germany	TV3	Kuala Lumpur, Malaysia
BBC Television Centre	London, UK	NRJ	Paris, France	TV7	Sofia, Bulgaria
Botswana TV	Gaborone, Botswana	NRK	Oslo, Norway	TVI	Lisbon, Portugal
BSkyB News	London, UK	NTV7	Kuala Lumpur, Malaysia	TV Nova	Prague, Czech Republic
BSkyB Sports News	London, UK	OBS	Seoul, Korea	TV Vest	Bergen, Norway
Chellomedia DMC	Amsterdam, Holland	Omni	Toronto, Canada	TVNZ	Auckland, New Zealand
CityTV	Calgary, Canada	Omroep Brabant	Eindhoven, Holland	TVNZ	Christchurch, New Zealand
CityTV	Edmonton, Canada	ProSiebenSat.1	Berlin, Germany	TVNZ	Wellington, New Zealand
Crete TV	Crete, Greece	QVC	London, UK	TV Trondelag	Trondheim, Norway
Czech Television	Prague, Czech Republic	QVC	Tokyo, Japan	UBF	Hilversum, Holland
Daystar	Dallas, USA	Red Bee Media	London, UK	WFMZ	Allentown, USA
DirecTV	Los Angeles, USA	Rogers Sportsnet	Toronto, Canada	WJCL-TV	Savannah, USA
ESPN	Bristol, USA	RTL	Luxembourg	WDR Bundesliga	Cologne, Germany
ESPN	Los Angeles, USA	RTP	Oporto, Portugal	WDR	Cologne, Germany
Fox Digital	Los Angeles, USA	RTP News	Lisbon, Portugal	WRCB	Chattanooga, USA
Fox Sports	Sydney, Australia	RTP Post Production	Lisbon, Portugal		

Compass, Dino, Enterprise sQ, eQ, FrameMagic, GenePool, Genetic Engineering, Integrated Server Architecture, iQ, ISA, Max, Mission, Marco, Neo, Newsbox, Pablo, Paintbox, Picturebox sQ, QCare, QColor, QEffects, Quantel, Resolution Co-existence, Resolution Transparency, Revolver, Sam, sQ, sQ View, sQ Cut, sQ Edit, sQ Edit Plus, TimeMagic, ZoneMagic are trademarks of Quantel Limited.

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