

R&S® VENICE

The ingest and production server



ROHDE & SCHWARZ



VENICE

The ingest and production server

VENICE is well-positioned as a future-ready ingest and production server for highly optimized file-based TV production workflows. VENICE manages classic video server tasks such as HD-SDI ingest and studio playout combined with intelligent file-based features like file ingest, transcoding, and media transfer operations for distribution. VENICE will streamline your production from ingest to distribution.

Its bridge-building capabilities gave the ingest and production server its name. They also form the basis for its ability to integrate seamlessly into any infrastructure. Using VENICE you can simply adapt your workflows to your actual requirements without being tied to a specific manufacturer.

VENICE – the art of bridging between:

Studio and post production as well as between different configurations:

- Flexible and individual configuration of each channel as well as assignment to different studios
- Open system architecture regarding storage connectivity, direct file access via FTP or SAMBA
- Huge variety of supported production formats, such as XDCAM®, DNxHD®, AVC-Intra, ProRes, and XAVC®

Different production environments: Extensive bridge to Avid® environments with Avid ISIS® and Interplay® production asset management (PAM) allows easy content ingest and outgest and therefore efficient production

Different technologies: Support of innovative interfaces such as FIMS (Framework for Interoperable Media Services) and MOS as well as classic ones such as VDCP

The traditional file-based and SDI world with its innovative file formats

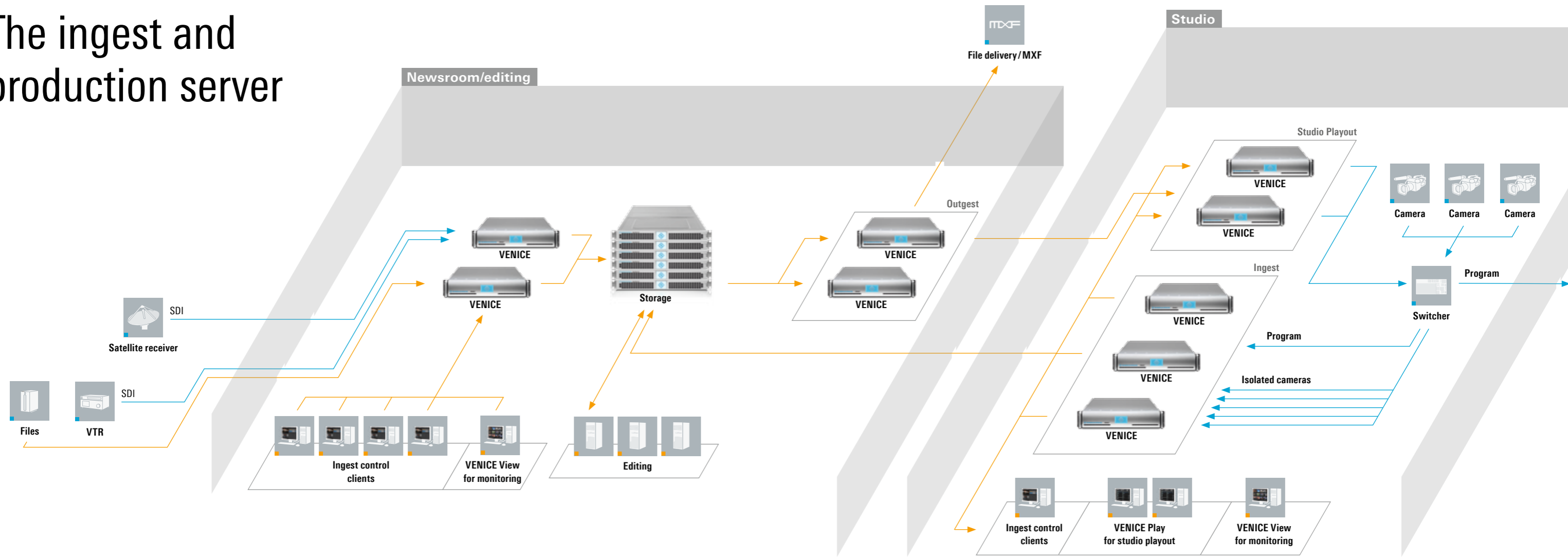
And last but not least: VENICE eases your daily business. It comes with an easy-to-use and intuitive software package as well as an extended feature set. Its browser-like look and feel enables editors to get to work immediately

“In addition to realtime ingest and studio playout, VENICE’s playlist has significantly improved our workflow. Handling large amounts of clips has become a true breeze. Thanks to VENICE’s intuitive GUI and its seamless collaboration with DVS’s SpycerBox, CG production has gained enormous efficiency, especially with numerous designers working at the same time. DVS’s integrated solution is now at the heart of our workflow.”

Masaaki Watanabe, Sports Graphics Designer at TV Asahi



The ingest and production server



Make use of VENICE's versatility to bridge diverse production environments:

Ingest during studio production

Utilize VENICE to cover the recording of SDI signals from cameras and video mixers during show or news productions.

Content ingest

VENICE enables you to load footage data from tapes and satellite feeds for subsequent editing or from tapeless camcorder media such as XDCAM® and P2 cards.

Studio playout

VENICE facilitates studio playout since edited segments are returned to the studio in the shortest possible time. One example is in news production, where speed is critical.

Distribution

Even the distribution of segments – for example via VOD or OTT platforms – is a breeze with VENICE. An integrated transcoder is available for this purpose.

Every application benefits from the ability of VENICE to access practically any storage system available on the market. VENICE extends the conventional video server functions to include essential features which permit file-based workflows in a streamlined TV production environment.

VENICE

The ingest and production server



Centralized content ingest and distribution

With its ability to handle baseband and file ingest, its format-independent SDI video channels, its powerful metadata handling and proxy file generation as well as its vast number of other features, VENICE is the ideal foundation for centralized content ingest. The integrated hardware scaler for

realtime up- and down-conversion ensures your material is available in the resolution needed. Its codec variety (supporting, for example, Avid DNxHD®, Apple ProRes, Panasonic AVC-Ultra, and Sony® XDCAM® in real time) and its openness provide users with maximum flexibility to organize their workflows. VENICE accommodates each and every scenario – even mixed environments with Avid Media Composer®, Apple Final Cut Pro®, and Adobe® Premiere®. Since VENICE also allows for integrated file ingest of P2 and XDCAM files including metadata editing, there is no need for additional equipment.

- ▮ **Integrated user interface provides control over up to 12 channels, including scheduled ingest**
- ▮ **Instant editing of time-sensitive content just a few seconds after the ingest process has started**
- ▮ **Proxy file generation parallel to hi-res ingest without the use of additional hardware**
- ▮ **Integrated file ingest of P2 and XDCAM® media including metadata editing**

- ▮ **Transcoding capabilities for ingest, file distribution, contribution, and support for the latest file formats such as AS-11, the subset of the MXF file format for delivery of finished programming, etc.**

The ingest and production server

Centralized content ingest and distribution

VENICE Record Scheduler

Managing your recording jobs becomes a breeze with the Record Scheduler. Integrated into the content control software R&S®Spycer, the Record Scheduler lets you handle different recording tasks with just a few clicks. This way you can even manage several channels on different VENICE systems easily.

When reaching the set time, VENICE will start recording automatically – while you are already busy with your next task. No overlapping, no other tasks blocking the channel – everything runs smoothly.

The SOAP protocol, with the award-winning FIMS standard, is used for recording.

- ▮ Easy handling of your recording jobs
- ▮ Comprehensive graphical overview
- ▮ Management of all channels even on different VENICE systems
- ▮ Recording jobs remain securely scheduled, no data loss
- ▮ Based on FIMS protocol (capture)

The screenshot shows the Record Scheduler interface. On the left, a list of jobs is shown with a legend: Blue = Completed jobs, Red = Current jobs, Orange = Scheduled jobs. The main area is a 'Planning window' with a grid of colored bars representing job schedules. On the right, a 'Job status' table lists job details.

ID	Status	Job Name	Start Time	End Time	Recording Location
111000001	Completed	01-000001	01-000001	01-000001	01-000001
111000002	Completed	01-000002	01-000002	01-000002	01-000002
111000003	Completed	01-000003	01-000003	01-000003	01-000003
111000004	Completed	01-000004	01-000004	01-000004	01-000004
111000005	Completed	01-000005	01-000005	01-000005	01-000005
111000006	Completed	01-000006	01-000006	01-000006	01-000006
111000007	Completed	01-000007	01-000007	01-000007	01-000007
111000008	Completed	01-000008	01-000008	01-000008	01-000008
111000009	Completed	01-000009	01-000009	01-000009	01-000009
111000010	Completed	01-000010	01-000010	01-000010	01-000010
111000011	Completed	01-000011	01-000011	01-000011	01-000011
111000012	Completed	01-000012	01-000012	01-000012	01-000012
111000013	Completed	01-000013	01-000013	01-000013	01-000013
111000014	Completed	01-000014	01-000014	01-000014	01-000014
111000015	Completed	01-000015	01-000015	01-000015	01-000015
111000016	Completed	01-000016	01-000016	01-000016	01-000016
111000017	Completed	01-000017	01-000017	01-000017	01-000017
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111000048	Completed	01-000048	01-000048	01-000048	01-000048
111000049	Completed	01-000049	01-000049	01-000049	01-000049
111000050	Completed	01-000050	01-000050	01-000050	01-000050

The screenshot shows the production server interface. It includes a video player (1) with a 'CRASH' button (3), a settings panel (4) for file formats, a 'General Editable' window (5) for metadata, and an audio routing matrix (6) for reassigning channels.

- 1 Smooth switching between ingest, playout, and transform mode
- 2 Video overlay helps you speed up the video display
- 3 Overview of modes: Crash, Auto Edit, Batchlist, Batch Selection
- 4 Configurable presets for easy selection of file formats
- 5 Extra window to add valuable information on metadata
- 6 Audio routing feature helps you reassign audio channels with ease

The ingest and production server

Content distribution

With its ability to handle baseband and file ingest, its format-independent SDI video channels, its powerful metadata handling and proxy file generation as well as its vast number of other features, VENICE is the ideal foundation for centralized content ingest. The integrated hardware scaler for realtime up- and down-conversion ensures your material is available in the resolution needed.

Its codec variety (supporting, for example, Avid DNxHD®, Apple ProRes, Panasonic AVC-Ultra, and Sony® XDCAM® in real time) and its openness provide users with maximum flexibility to organize their workflows. VENICE accommodates each and every scenario – even mixed environments with Avid Media Composer®, Apple Final Cut Pro®, and Adobe® Premiere®. In addition, all major file formats are supported: MXF OP-Atom, MXF OP-1a, QuickTime®, MPEG transport stream, and GXF. Thanks to its open software design, future implementations of new codecs and containers are easy to integrate.

Since VENICE – in combination with the R&S® Spycer control content software – allows for file ingest of P2 and XDCAM® files including metadata editing, there is no need for additional equipment.

Distribution and transfer

VENICE helps you prepare and distribute content efficiently. The production server allows smooth and fast file conversion (transcoding and transwrapping) as well as rough-cut editing for content delivery. Moreover, finalized contributions can easily be transformed into deliverable formats such as AS-11.



The screenshot displays the VENICE software interface. On the left, a video preview window (1) shows a street scene with yellow taxis. Below it is a progress bar (2) indicating 69% completion at 152.67 fps. The central area features a 'TRANSFORM LIST EDITOR' table (4) with columns for Thumbnail, Duration, Source file format, Name, Path+File name, Inpoint, and Outpoint. The table lists various video clips with their respective durations and file paths. Below the table is a control panel (3) with buttons for 'IN', 'GO', 'OUT', and 'GO', along with timecode fields. On the right, a settings panel (5) is open, showing options for Video (File format: MXF OP1a, File type: XAVC, Codec: XAVC HD Intra class 100 CBG, Target resolution: 1920 x 1080i 25 SMPTE274, Auto scale: Off, Color range: Video mode (head)), Audio (File format: MXF OP1a, Output mode: Multichannel file, File Type: AES, Bit depth: 24 Bit), and Timecode (Timecode type: Internal TC, Start TC: 10:00:00:00, Timecode mode: Non-drop frame).

Thumbnail	Duration	Source file format	Name	Path+File name	Inpoint	Outpoint
	00:00:07:19	MXF OP1a XDCAM HD...ps CBR 8Bit 4:2:2	24h_START	lmedia...R.T.mxf	00:01:27:05	00:01:34:24
	00:00:13:22	AVC-Intra50	24h_GRID	lmedia...RID.mxf	00:00:11:17	00:00:25:14
	00:00:07:00	AVC-Intra100	24h_IMOLA	lmedia...LA.mxf	00:00:16:23	00:00:23:23
	00:00:25:19	MXF OP1a XDCAM HD...ps CBR 8Bit 4:2:2	24h_RACE	lmedia...CE.mxf	00:00:20:24	00:00:46:18
	00:00:29:00	MXF OP1a XDCAM HD...ps CBR 8Bit 4:2:2	24h_INTRO	lmedia...RO.mxf	00:00:07:05	00:00:36:05
	00:00:22:04	MXF OP1a XDCAM HD...ps CBR 8Bit 4:2:2	24h_FINISH	lmedia...ISH.mxf	00:00:00:00	00:00:22:04
	00:00:20:13	MXF OP1a XDCAM HD...ps CBR 8Bit 4:2:2	24h_NIGHTRACE	lmedia...CE.mxf	00:00:33:17	00:00:54:05
	00:00:03:02	MXF OP1a XDCAM HD...ps CBR 8Bit 4:2:2	24h_PITSTOP	lmedia...OP.mxf	00:00:16:05	00:00:19:07
	00:00:03:06	MXF OP1a XDCAM HD...ps CBR 8Bit 4:2:2	24h_SIEGEREHRUNG	lmedia...NG.mxf	00:00:02:18	00:00:05:24

- 1 Preview for easy identification
- 2 Progress bar to visualize the status of ongoing operations
- 3 Configurable presets for easy selection of file formats
- 4 Batch transforming to facilitate and accelerate transforming processes
- 5 Extra window provides information on file format settings

5

VENICE

The ingest and production server

Efficient production in Avid® environments

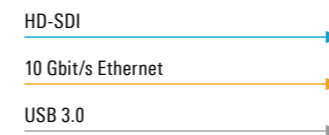
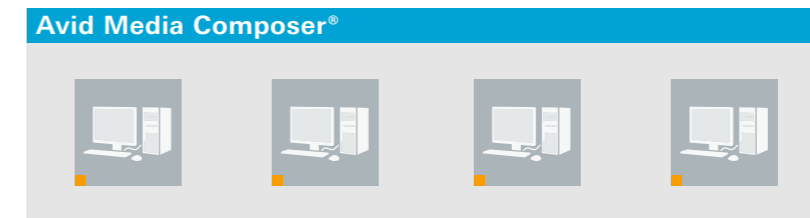
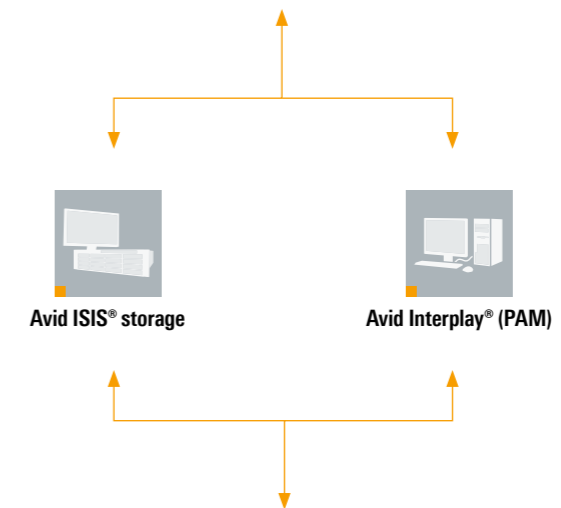
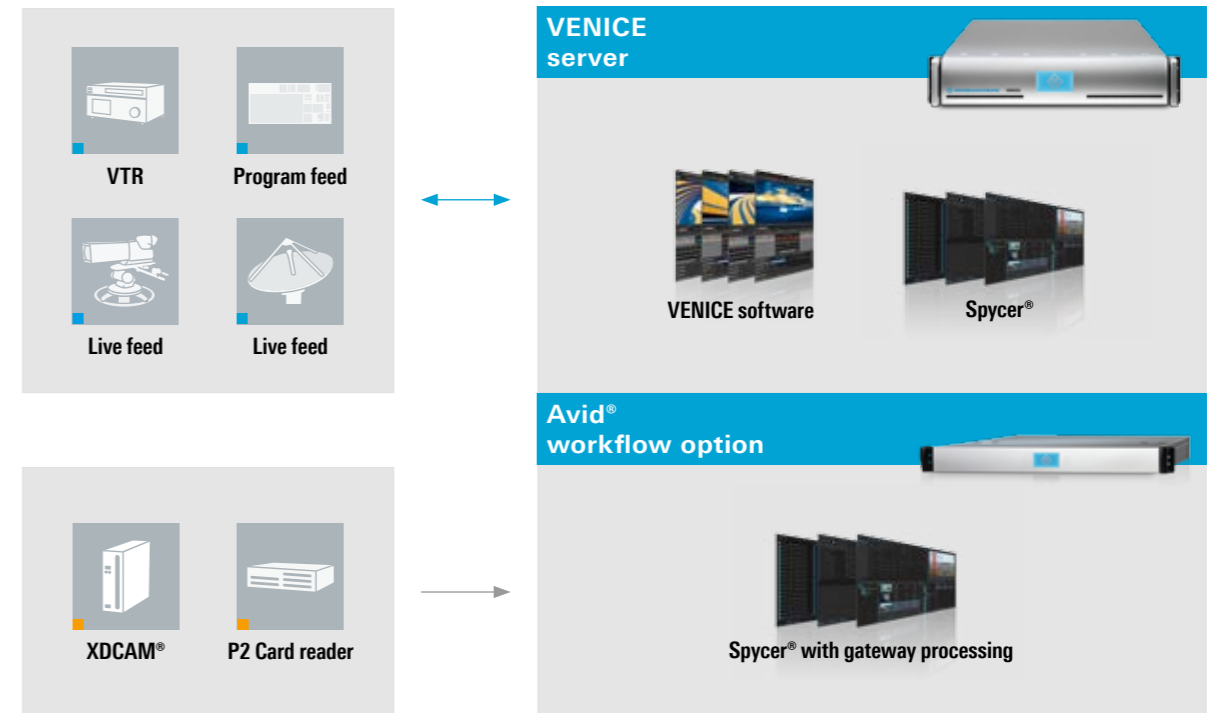
The Avid® workflow option lets you realize fast user-friendly workflows with Avid's shared storage solution ISIS® and production-asset management system Interplay®. HD-SDI sources and their metadata can be ingested directly into ISIS® with Interplay check-in.

In addition to signal ingest, the Avid® workflow option also provides the opportunity to ingest file-based media directly from Panasonic's P2 and Sony's XDCAM® by simply dragging and dropping the content into Avid ISIS® and Interplay®. Both signal and file ingest support frame-chase editing in Media Composer® enabling immediate browsing and editing of content.

The new outgest functionality facilitates the fast outgest of clips and sequences from Avid ISIS® and Interplay® for immediate playout and file distribution. Sequences containing a variety of audio and video clips are intelligently stitched together using enhanced transwrapping technology to ensure rapid transfer and immediate playout – especially helpful for covering breaking news.

"As a systems partner, it was particularly important to make integration easy for TeleZüri. DVS equipment allowed us to meet this aim and equip our important Swiss customer with high-end technology."

Michael Jordi, Managing Director of Jordi AG Communication



VENICE

The ingest and production server

Studio live production

Use VENICE to streamline your workflow by reducing the number of systems. With the ingest and production server, you can comfortably combine several production steps. In addition to hi-res ingest, proxy files can be created in parallel to meet proxy file-based workflows.

Thanks to its dual-destination recording feature, VENICE helps you protect your valuable content. With VENICE you will never miss a single shot again. Thanks to its versatile setup, its huge variety of supported codecs, and its flexible channel configuration, VENICE can respond quickly to your customers' changing requirements.

- | User-friendly GUI for program and multi-camera ingest as well as sophisticated multi-channel studio layout
- | Enhanced protection for high-value content thanks to dual-recording feature: Content is recorded simultaneously and independently on two different storage devices
- | Breaking news coverage: Content can be played out while it is still being transferred from production storage or proprietary systems such as Avid Avid ISIS® and Interplay®
- | Enhanced reliability for live studio production: Redundancy setup with client mirroring
- | Easily adaptable to changed production environments thanks to versatile channel assignment and configuration



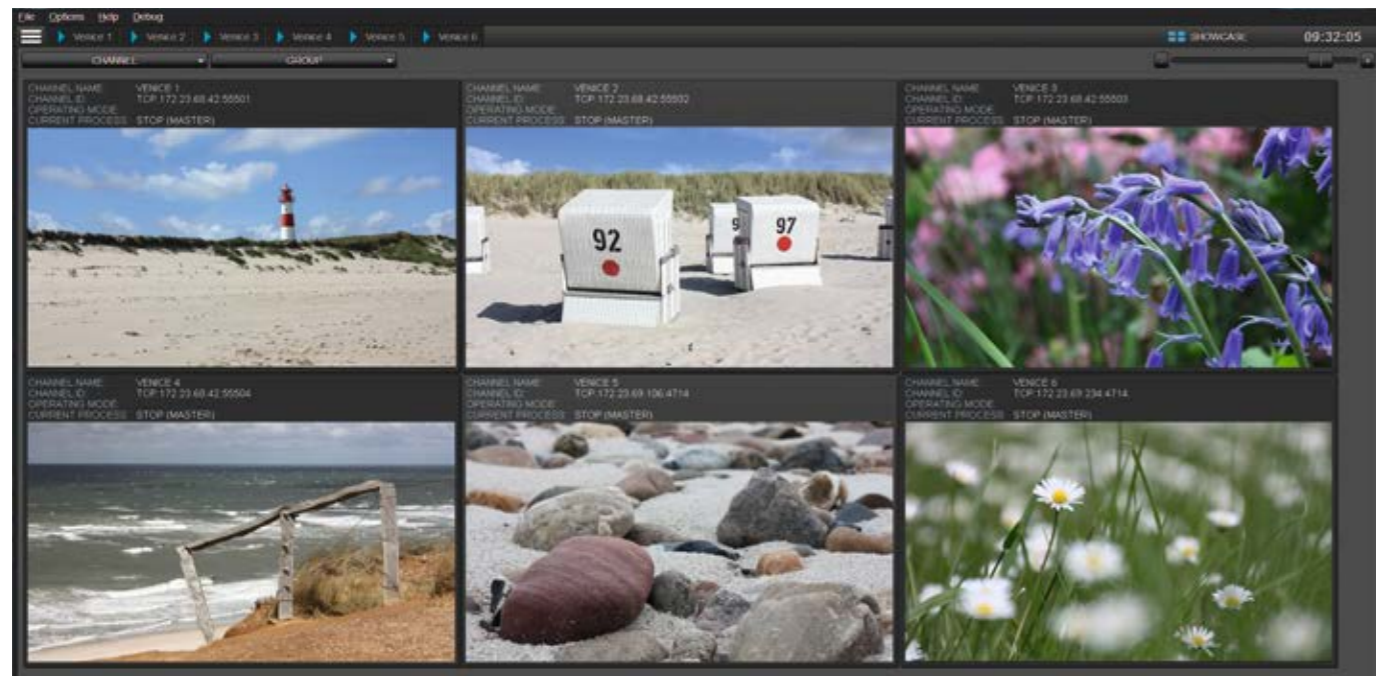
The ingest and production server

Studio live production

Multi-camera ingest

VENICE paves the way for multi-camera ingest, simplifying studio production work. The integrated GUI is easy to use and allows multi-camera recording. Operators can save entire production “scenarios” – presets which include all the required servers and settings. This facilitates the production of weekly shows, with the scenarios containing all acquired channels, modes, projects, and channel presets.

The dual recording function also offers enhanced redundancy: One channel can now record on two different storage systems independently, such as production and internal storage systems.



Channel grouping

With the new channel-grouping feature, VENICE offers parallel recording as well as frame-accurate starting and playout of multiple grouped channels. This is extremely useful, especially in multi-camera production scenarios where you can create a single channel group to ingest or play out several channels simultaneously.

Channel grouping can be used via an RS-422 or TCP/IP connection. Simply use your existing Ethernet network to link one or more VENICE channels, regardless of whether they are on the same server or on different ones. This lets you create a large cluster of ingest or playout devices. In addition, channel groups can be stored and reopened.



Safe and reliable

Thanks to its dual-destination recording feature VENICE is able to save HD-SDI signals in parallel and independently of each other in two different storage environments per channel. This ensures important live material is recorded reliably especially in hectic circumstances. The new studio playout GUI's client-mirroring function is another part of the latest redundancy solution in VENICE, which additionally offers increased system stability under live conditions.

The ingest and production server

Studio playout

Easiest control and overview

The intuitive software is specifically designed to make your life easier in hectic live situations. VENICE allows you to conveniently and easily configure and control multiple channels at the same time. This lets you allocate the available channels between different studios flexibly, enabling you to assign them to tasks and studios as needed. A redundant setup is made possible thanks to client mirroring. In combination with the Avid® workflow option, content can be played out directly while it is being transferred from Avid ISIS® and Interplay®.

The new VENICE Play software is another part of the approach for easy playout. It allows you to bundle multiple channels in one playlist, providing you with a comprehensive overview. Its clear and simple design with large progress bars and timecodes helps you keep control at all times.

It is extremely easy to organize your clips: Choose between organizing them in rundown lists or stories. A/B playout and auxiliary playout channels can also be displayed and controlled at the same time.

Thanks to the combination of VENICE Play and the integrated Spycer® browsing features, content management becomes a breeze. It helps you create a transparent network that makes the content of all connected proprietary systems available for viewing and editing by means of a wide array of tools. Browse content throughout your network, create playlists, easily rename clips, and perform various media operations while the content is being played out, etc.



Clips can be edited while the rundown list is playing

- 1 Comfortable browsing including copying features
- 2 Precise overview of timecode and progress bar
- 3 Clips can be organized in rundown lists or stories
- 4 Comfortable selection of channels
- 5 User-defined text
- 6 Comfortable setting of in and out points
- 7 Playlist with A/B channel assignment

The ingest and production server

Open philosophy

Rohde & Schwarz DVS realizes you are faced with the unique demand for both time-sensitive and high-quality content delivery, which is why we share your need for open systems with our philosophy of openness. VENICE offers an open file-system supporting all relevant IT interfaces for direct access. Moreover, the completely open system architecture lets you design workflows individually, including editing clients, e. g. Media Composer® and Final Cut Pro® systems. Integrate VENICE freely into any existing network structure and expand your storage via common interfaces such as Fibre Channel.

VENICE remote user interface

VENICE provides a comprehensive software package which runs on a Red Hat® Enterprise Linux® platform. The full version of R&S®Spycer data management software is pre-installed on the system to provide all content information for the remote user interfaces. The remote client is an efficient and effective tool, tailored to your needs: Control the ingest and production server from your own desk, arrange, and coordinate server jobs. The remote user interface is available for Windows®, Mac OS® and Linux®.

Open standards for autonomy and flexibility

VENICE can be integrated into every production environment thanks to the use of open communications standards and its web-service-based architecture; it also supports all conventional broadcast file formats and codecs. Support for manufacturer-independent interfaces such as MOS and FIMS allows for workflow flexibility. Rohde & Schwarz DVS was among the first companies in the world to integrate the open, web-service-controlled framework for interoperable media services (FIMS) communications standard into one of their systems: VENICE.

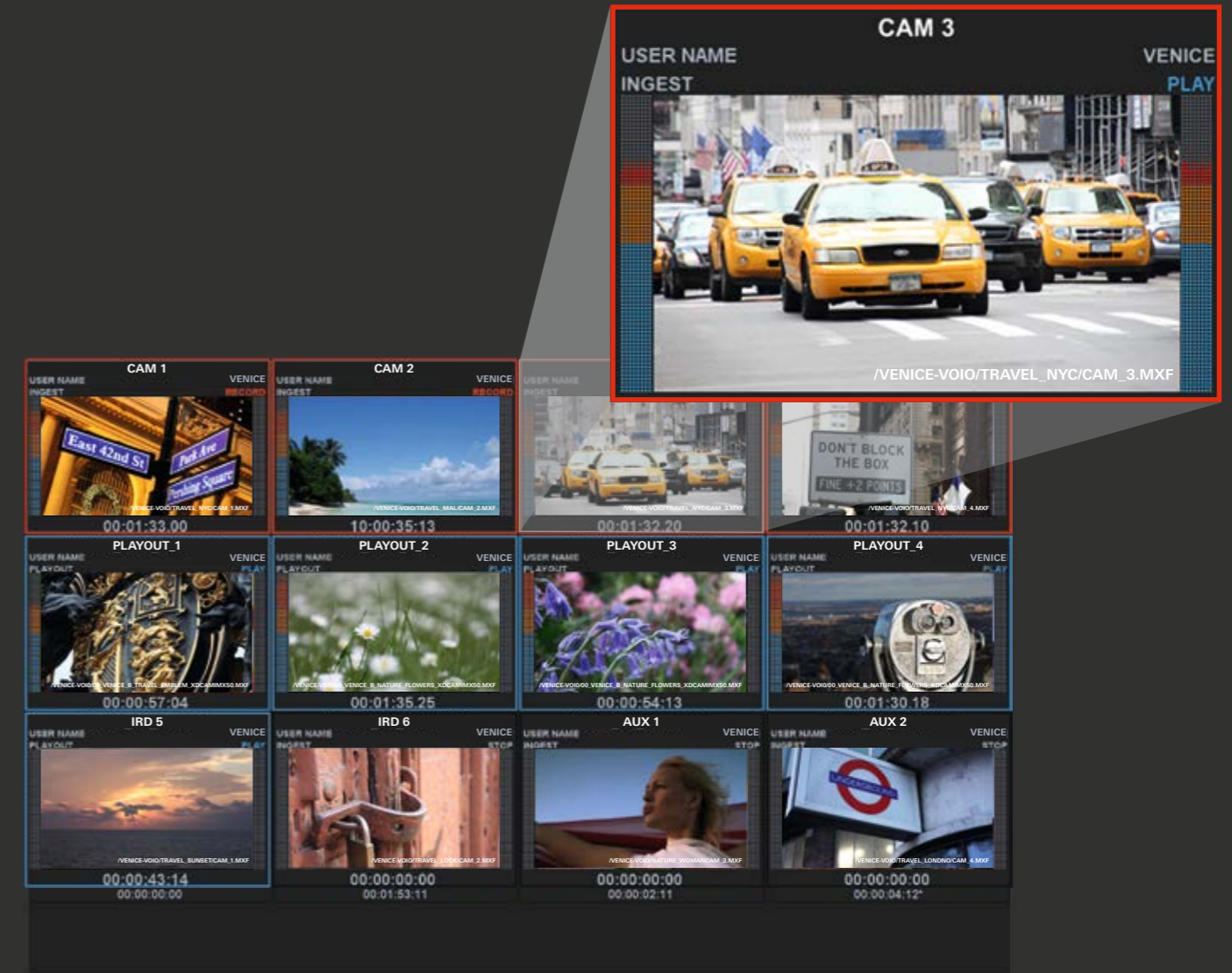
The art of bridging

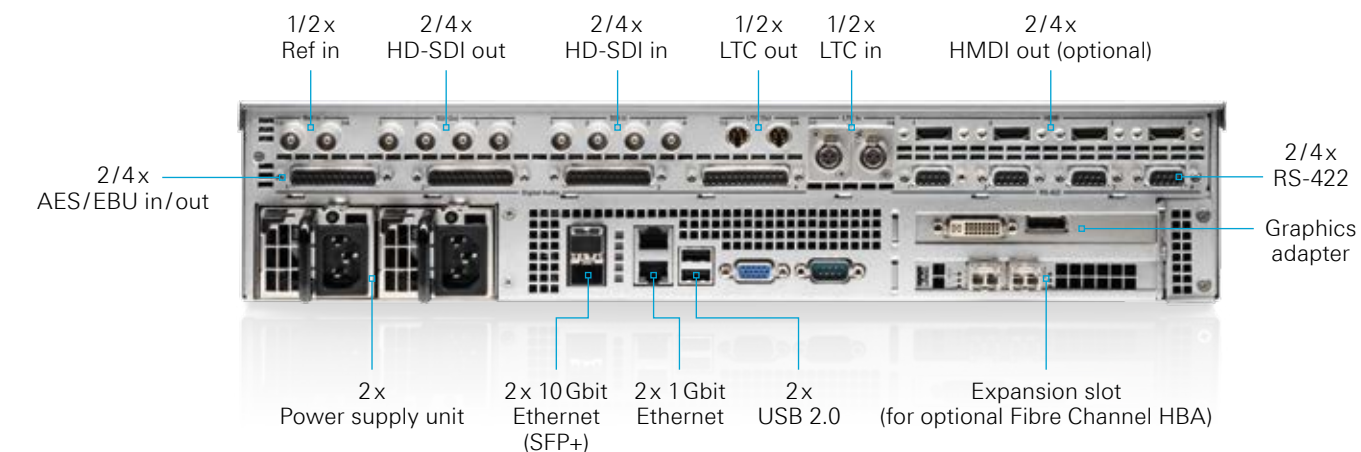
To sum it up: VENICE's bridge-building capabilities not only gave the ingest and production server its name, they also form the basis for its ability to integrate seamlessly into any infrastructure.



VENICE View – the perfect overview of all your content
Monitoring all your VENICE video channels becomes a breeze with the new VENICE View software solution. VENICE View allows you to assemble an overview of all VENICE channels in your facility on a single system. This is where VENICE's bridge-building capabilities come in again: Based on its open philosophy, there is no need for extra

multi-viewer equipment. VENICE View offers monitoring of video overlay, channel name and status, timecode information, as well as the audio peakmeter of every connected VENICE video channel. VENICE View uses a sophisticated IP-based software architecture which can be utilized in existing IP networks without the need for extra SDI cabling and expensive multi-viewer equipment.





	VENICE 2U			VENICE 4U
	Standard (playout mode only)	Standard with ingest option (adds ingest mode)	Standard with ingest + transfer option (adds ingest and transform mode)	
Functionality options				
Available amount of Channels				
2 Channel	•	•	•	•
4 Channel	•	•	•	•
Media storage				
none (with Fibre Channel interface)	•	•	•	•
3000GB	optional	optional	optional	-
6000GB	optional	optional	optional	-
9000GB	optional	optional	optional	-
4200GB	-	-	-	optional
6300GB	-	-	-	optional
8400GB	-	-	-	optional
HPE option (NLE attachable)	-	-	-	optional
Connectors				
HDMI output	optional	optional	optional	•
Software features				
File ingest	-	•	•	•
Proxy generation	-	•	•	•
Batchlist recording	-	•	•	•
Transforming	-	-	•	•
Batchlist transforming	-	-	•	•
Head and tail cutting	-	-	•	•
VENICE Play server license	optional	•	•	•
Workflows				
Avid® workflow	optional	optional	optional	optional
Formats				
SD	•	•	•	•
HD 720p/1080i	•	•	•	•
1080p 50/60	-	-	•	•
2K	-	-	•	•
4:4:4	-	-	•	•
Uncompressed file formats	-	-	•	•

Key features

- Ingest and production server for editorial or live studio production
- Scalable multi-channel system (2 or 4 channels per unit, multiple units can be clustered)
- Ingest, playout and transcoding in one single box
- Support of all broadcast-relevant file formats
- Open system architecture enables easy integration into broadcast environments:
- Open file system (internal storage can be accessed)
- Storage connectivity
- Proprietary storage can be accessed easily
- Flexible and individual configuration of channels
- Support of open standards such as FIMS, MOS, and VDCP
- Integrated software for:
 - SDI ingest (live, tape, and scheduled recording)
 - SDI playout (studio playout, visual QC, and archive-to-tape)
 - Transcoding (rough-cut editing, creation of deliverables, mastering)
 - Control control (file ingest, outgest, and metadata editing)
 - Monitoring (channel and job status)

Remote user interface

- Easy-to-use remote user interface for Windows®, Mac OS®, and Linux®
- VENICE Play software for studio playout
- Fast video channel selection and operation via network connection
- Scenarios, projects and presets for defining settings used on a daily basis

Ingest mode

- Channel grouping for multi-camera ingest
- Dual-destination recording
- Hardware scaler for up- and down-conversion in real time
- Proxy file generation in parallel without usage of additional hardware
- VTR control via Sony 9-pin (RS-422) per channel
- Batchlist recording (including EDL and ALE support)
- ANC data support (SMPTE 436M)
- Clip chunking (split on duration or time code break)
- Avid® workflow option to connect to Avid ISIS® and Avid Interplay® production asset management (PAM)

Transform mode

- Batchlist transcoding (individually or all in one)
- Clip trimming
- Rough-cut editing
- AS-11 (DPP) mastering
- Playout mode**
- Dynamic playlists
- In and out points for clips
- Archive to tape (including VTR control)
- Hardware scaler for up- and down-conversion in real time
- Alpha channel support

Studio playout

- Intuitive user interface for live productions
- Control of multiple playout channels
- Dynamic rundown lists with stories and items
- A/B playout mode
- Comfortable channel configuration
- Integrated content browsing
- Redundant client set-up
- Clip trimming
- Loop mode for items or stories

Supported file formats

Container

- MXF OP-1a
- MXF AS-11
- MXF OP-Atom
- MXF OP-Atom (Avid®)
- MXF P2
- QuickTime®
- DV-DIF
- MP4
- MPEG-PS
- MPEG-TS
- GXF
- LXF (only playout)

Codecs

- Avid DNxHD® 36–440
- Panasonic DVCPRO® 25/50
- Panasonic DVCPRO® HD 100
- Panasonic AVC-Intra 50/100/200

- Sony XDCAM® DV 25
- Sony XDCAM® IMX 30/40/50
- Sony XDCAM® HD 18/25/35
- Sony XDCAM® EX 35 Mbps (OP-1a)
- Sony XDCAM® HD 422
- Sony SR Lite (only playout)
- Sony XAVC (Intra 50/100)
- Apple ProRes 422/444 (Proxy/LT/HQ)
- MPEG-2
- H.264 AVC (high profile 4:2:2)
- Supported uncompressed formats**
- DPX 8/10 bit RGB 4:4:4
- DPX 8/10 bit YUV 4:2:2 or RGBA 4:4:4
- TGA (Targa, including alpha channel)
- QuickTime® 8/10bit YUV 4:2:2
- WAV, AIFF
- RF64: Extensible wave format with BWF extension (>4GB)
- Proxy file formats**
- MPEG-1
- MPEG-2
- MPEG-4 (AVC, baseline or main profile) .mp4
- MPEG-4 (AVC, baseline or main profile) .m2t
- MPEG-4 (AVC, AFN100) .MXF

Supported resolutions

SD

- 525i/29.97 (NTSC)
- 625i/25 (PAL)

HD

- 1280x720p / 23.98/24/25/29.97/30/50/59.95/60
- 1920x1080i / 23.98/24/25/29.97/30/50/59.95/60
- 1920x1080p / 23.98/24/25/29.97/30
- 1920x1080p / 50/59.95/60 (one channel only)

2K SDI (ONE CHANNEL ONLY)

- 2048x1080p / 23.98/24/25

System

Video I/O

- Autodetecting 1,5/3 Gbit/s single-link SD/HD-SDI input and output
- Dual-link SD/HD-SDI input and output (up to two channels per unit; for keying or 4:4:4 operations)

- HD/SD genlock input, 1 x BNC
- HDMI output (optional)
- Audio interfaces per video channel**
- 8 channels digital audio AES/EBU
- 16 channels embedded audio at SDI connector
- Control interfaces**
- RS-422 remote, 1 x DSub 9 pin
- LTC input and output, 1 x XLRf and 1 x XLRm
- Control protocols**
- VDCP and Sony 9-pin protocol via RS-422
- MOS 2.8: profiles 0,2,5
- Web-service API based on
 - FIMS 1.07: Capture, Transform
 - MOS 3.8: profiles (0,2,5)
- Spycer® content control

System

- 2U 19" rack mount with rack mount rails dimensions: 480 mm (W)x88 mm (H)x640 mm (D) or 4U 19" rack mount with rack mount rails dimensions: 480 mm (W)x176 mm (H)x655 mm (D)
- Linux® (64 bit) operating system
- Graphics adapter with DVI and DisplayPort
- DVD reader/writer on 4U model
- Redundant power supply (1500W + 500W 4U model, 2x 750W 2U model)
- Power supply A-C 100-240V 50/60Hz
- IPMI 2.0 (Intelligent Platform Management Interface) for remote system management

Storage

- SAS drives (RAID-1) for operating system and metadata
- Up to 9 TB SAS drives (RAID-6) for content

Interfaces

- 8x USB 2.0 (two at front, six at rear on 4U model)
- 1x USB 3.0 at front, 2x USB 2.0 at rear on 2U model
- 2x 10/100/1000 Base-T Ethernet
- 2x 10Gbit Ethernet (optical) on 2U model
- 1x 1000 Base-T Ethernet for remote system management access (IPMI)
- 10Gbit Ethernet (option on 4U model)
- 8Gbit Fibre Channel (option)

i Please note that some features may be optional.

i Please note that there are hardware limitations regarding the in- and output of 2K, 4:4:4, AVC-Intra and some uncompressed video material. On some VENICE hardware variants the channel number supporting simultaneous in- and output of these contents may differ. Not all container formats can be combined with all codecs.

Service

Offering superior service for our entire product portfolio is integral to the Rohde&Schwarz DVS philosophy. Our support and service team is comprised of engineers who consider first-class, professional customer service their first priority.

We offer optimum support and service, with service packages tailored to clients' specific needs. Our service team can assist onsite or perform services quickly and reliably via remote control. Rohde&Schwarz DVS also has a service website, complete with detailed technical documentation to provide current updates, upgrades, and relevant information.

Our services reflect the quality of our products: Our clients benefit from individualized support and reliable service.

Our service team is available to you at service.dvs@rohde-schwarz.com

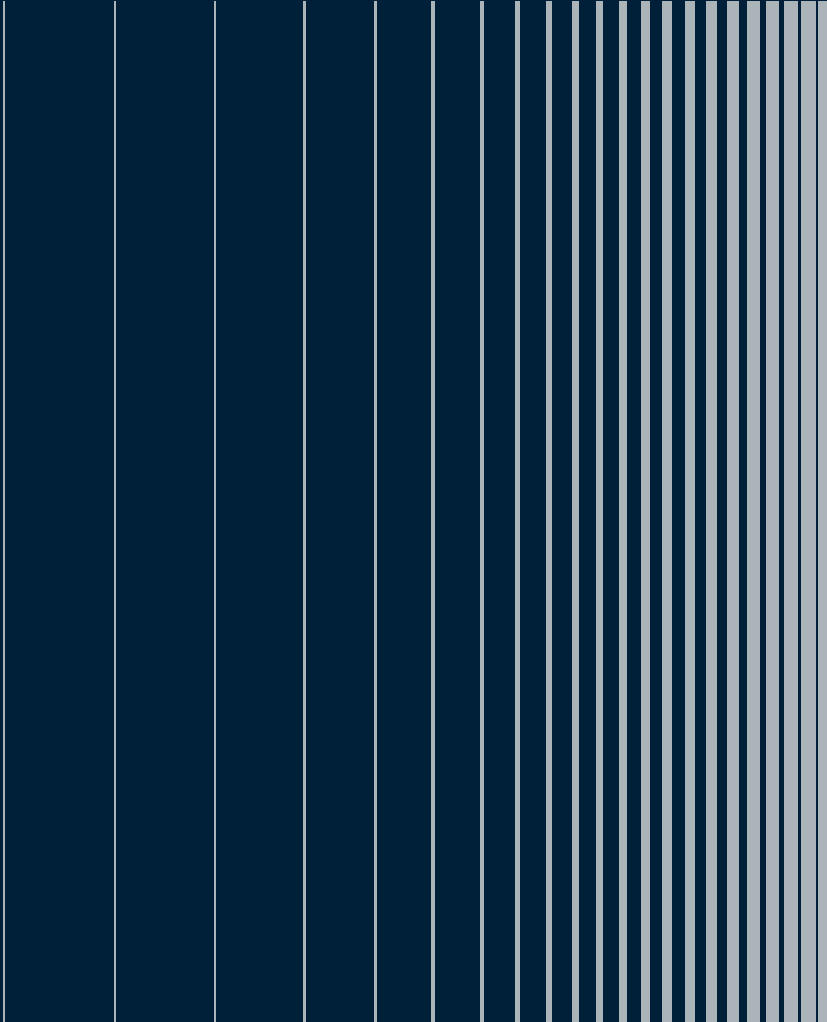
Training

Learn in-depth about your product from Rohde& Schwarz DVS. With our comprehensive training program, we offer the opportunity to become completely at home with your equipment. We're also happy to support you with the implementation and setup of your system.

Our authorized Education Center offers individual training programs onsite and is ready to assist you with relevant information on each workflow. We'd also be happy to welcome you at the Rohde& Schwarz DVS headquarters for a hands-on training session with your new equipment. You will receive concise training courses for various product updates, allowing you to immediately familiarize yourself with new developments.

Our professional training courses provide you with the detailed knowledge to make the most of your equipment.

Ask about our training packages at training.dvs@rohde-schwarz.com



About Rohde & Schwarz DVS

For more than 25 years, Rohde & Schwarz DVS GmbH has been very successful in the professional film, video post production and broadcast markets. The specially developed and manufactured hardware and software are applied to the production of popular TV series, Hollywood blockbusters and in Digital Cinema. R&S®CLIPSTER was the first system in the world to make realtime 4K processing possible. The future-proof ingest and production server R&S®VENICE offers a flexible solution for modern, file-based workflows in broadcast environments.

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