



SONY



Image·IP·Workflow

Fabien.Pisano@eu.sony.com

South Europe head

Sony Professional Europe

SONY



HDR services and productions are taking off worldwide

Services



SONY

OTT / TV Production / Cinema



HDR is here

First HDR services are streaming now

More live broadcast trials completed

More TVs & projectors with HDR are here

More life-like pictures

HDR



Post production workflows are proven

Cameras in widespread use

Grading and client monitors are here

Standards for production and exchange are here

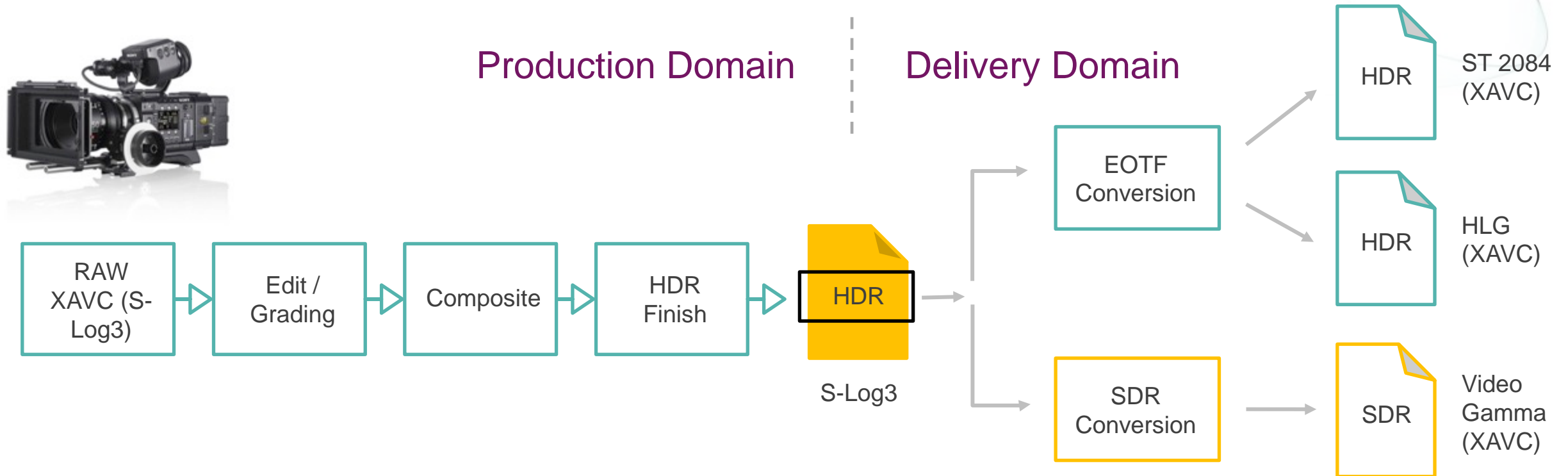
Standards are here

Transfer Function / Metadata		Comment
SMPTE	ST 2084 (PQ) EOTF ST 2086 (Display Static Metadata) ST 2096 (Dynamic Metadata)	Completed Completed Ballot completed
ITU-R	ITU-R BT.2100	Published
ARIB	ARIB STD B67 (Hybrid Log-Gamma)	Published
DVB	In progress	UHD1 Phase 2 Standardization in 2016

Tools for HDR Production



HDR workflow for optimum results : S-Log3 for acquisition



- S-Log3 is designed to preserve the captured source light efficiently
- Optimised for production, recording and future re-use (re-grade)

New Announcements



HDC-4800
Camera System
& Share Play
Availability: Now



HDC-P43
Lightweight Point of View
camera integrated with
existing HD infrastructure
Availability: Jan 2017



DWT-P01N
Pro Audio digital
wireless microphone
plug-on transmitter
Availability: E/Oct



HXR-NX5R
Our ultimate compact
Full-HD camcorder
Availability: Mid/End Sept 2016



BVM-X300 Version 2
4K OLED unleashed
Availability: October 2016



MCX-500
Pro-quality switcher,
accessible price
Availability: Jan 2017



BVM-E251 and BVM-E171
New TRIMASTER EL™
OLED reference monitors
Availability: January 2017



BRC-X1000
Our first 4K PTZ robotic
network camera
Availability: Jan 2017



PVM-X550
55-inch 4K TRIMASTER
EL™ OLED high grade
picture monitor
Availability: Now



BRC-H800
1" Exmor CMOS sensor
for detail-packed Full HD
images
Availability: Jan 2017



DWR-S02DN
Pro Audio portable
slot-in receiver for
Sony camcorders
Availability: E/Oct



UPDATE:
PXW-FS5 V3.0



UPDATE:
PMW-F55 & F5 V8.0
Availability: M/Sept2016



AXS-R7
External 4K Portable
Memory Recorder for
F55 and F5
Availability: E/Sept 2016

SONY

Image•IP•Workflow



Technology Innovator – Ready Today Open For Tomorrow

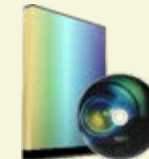
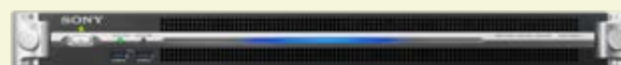
Ready Today	Open for Tomorrow
Current SMPTE Standards + RDD	Coming Open Standards SMPTE 2110 (TR-03) AMWA NMOS
Supporting all Alliances IP Live Alliance - ASPEN - AIMS - AMWA NMI - JT-NM	
Delivering Unified Interoperability Networked Media Interface (NMI)	

IP Live Alliance



End-to-end IP Live Production

Operation



PWS-110NM1
IP Live System Manager

Acquisition



HDC-4800



BPU-4800



HDC-4300



HDC-P43



BPU-4500



HDCU-4300
HKCU-IP43F

4K/HD System Camera

Production



XVS-6000 XVS-7000 XVS-8000

4K/HD Production Switcher



PWS-4500
4K/HD Production Server

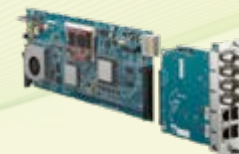
Processing



NXL-FR318
Signal Processing Unit



NXLK-IP40F
SDI-IP Converter



NXLK-IP45F
AV Multiplexer/
DeMultiplexer Board

Monitoring

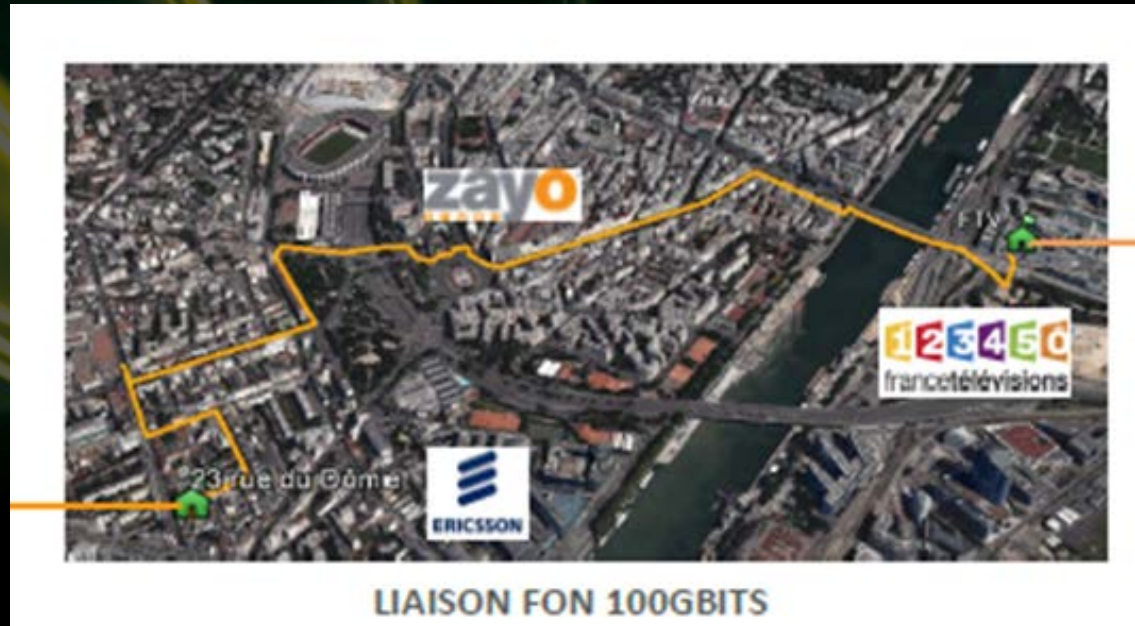


NXL-IP4F
SDI-IP Converter Unit



PWA-MV1N
IP Live Multi-viewer

IP LIVE POC FTV



Ericsson :
23 Rue du Dôme
Boulogne Billancourt

France Télévisions :
18 rue du Professeur-Florian-Delbarre
75015 Paris

Technical Brief

This POC is 2022-6 based :

- 2022-6 is the minimal common denominator for such a big number of participants
- Soon, SMPTE 2110 will replace SMPTE2022-6

What's new : two remote sites are connected (compared to POC V1, 2015)

Limitations :

- No common Software Defined Network
- No device Discovery methods,
- No Dynamic System allocation

Sony contribution (ON FTV site):

- System Camera Chain 4K IP /SDI with HDC-4300 + BPU4500 + HDCU 4300 + RCP 1500
- Vision Mixer MVS 6530
- SDI – IP Converters
- Integration with Imagine Communications 4K downscaler and NMI to 2022-6 converter

IP training program

IPL E-Learning :

- The Sony Knowledge Portal : <http://t.info.pro.sony.eu/r/?id=h198d810,38d4db3,38d4db8>
- Each piece of E-Learning should last no longer than 10min
- **Focus :**
 - Network Fundamentals
 - IP Live Products & Applications
- **Main topics :**
 - Basics of Networks, First Products and Applications

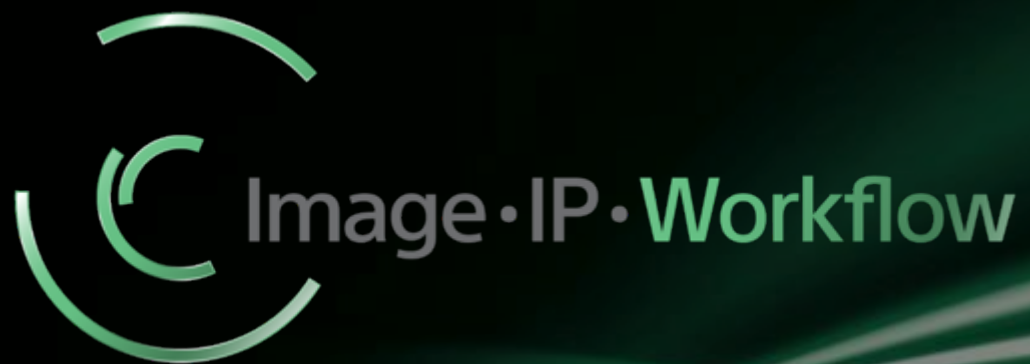
IPL F2F training :

- **2 main modules:** Network Fundamentals* & IP Live Production Products & Solutions
- **Focus :**
 - Technical Knowledge of IP Networks design and management* (2 days w/ External Network Company)
 - Technical Knowledge of IP live Production System Design & Operations (2 days)
- **Main topics :**
 - Network Design, IP for Live Production, System Design, System Configuration, ...

IP training program

Course	Location	Cost per student
Juniper Network Fundamentals + Sony IP Live Fundamentals	Pinewood	€2,500
Sony IP Live Fundamentals (standalone course)	Pinewood	€1,250
Juniper Network Fundamentals + Sony IP Live Fundamentals	Non UK Location	€2,500 + Logistics
Sony IP Live Fundamentals (standalone course)	Non UK Location	€1,250 + Logistics

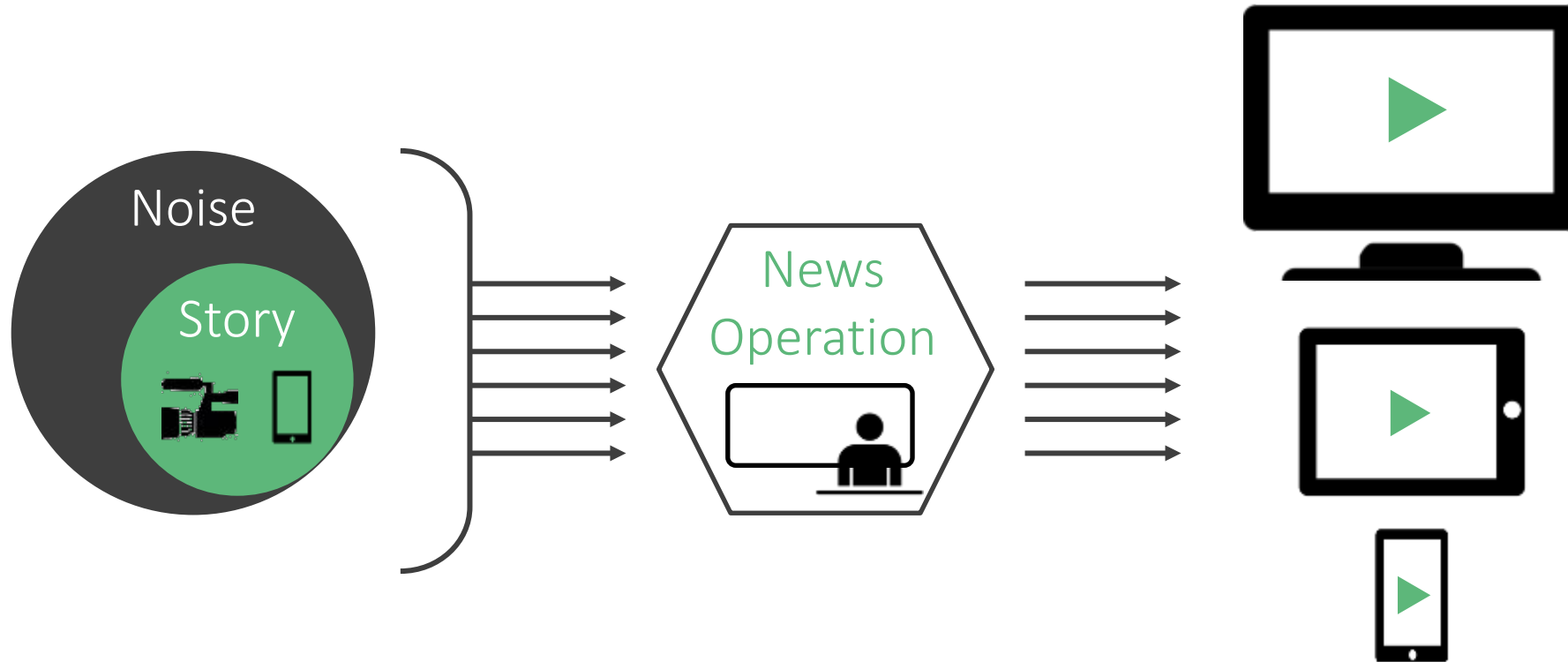
- Course will be minimum 6 people. To ensure a good quality of training we limit the course numbers to a maximum of 10 people.
- Based on the training delivered by other network companies . Industry standard charge is around 7,000 USD per trainer day!
- We are still investigating Junipers capabilities to deliver the training in local language as well as local ICE Training capabilities. Primary training language will then be English.
- We can run these training program courses for customers & associations as well for the same charge.



Media Backbone Hive, a key highlight at the show



Broadcast news production is seeing a revolution in the story of source to consumption



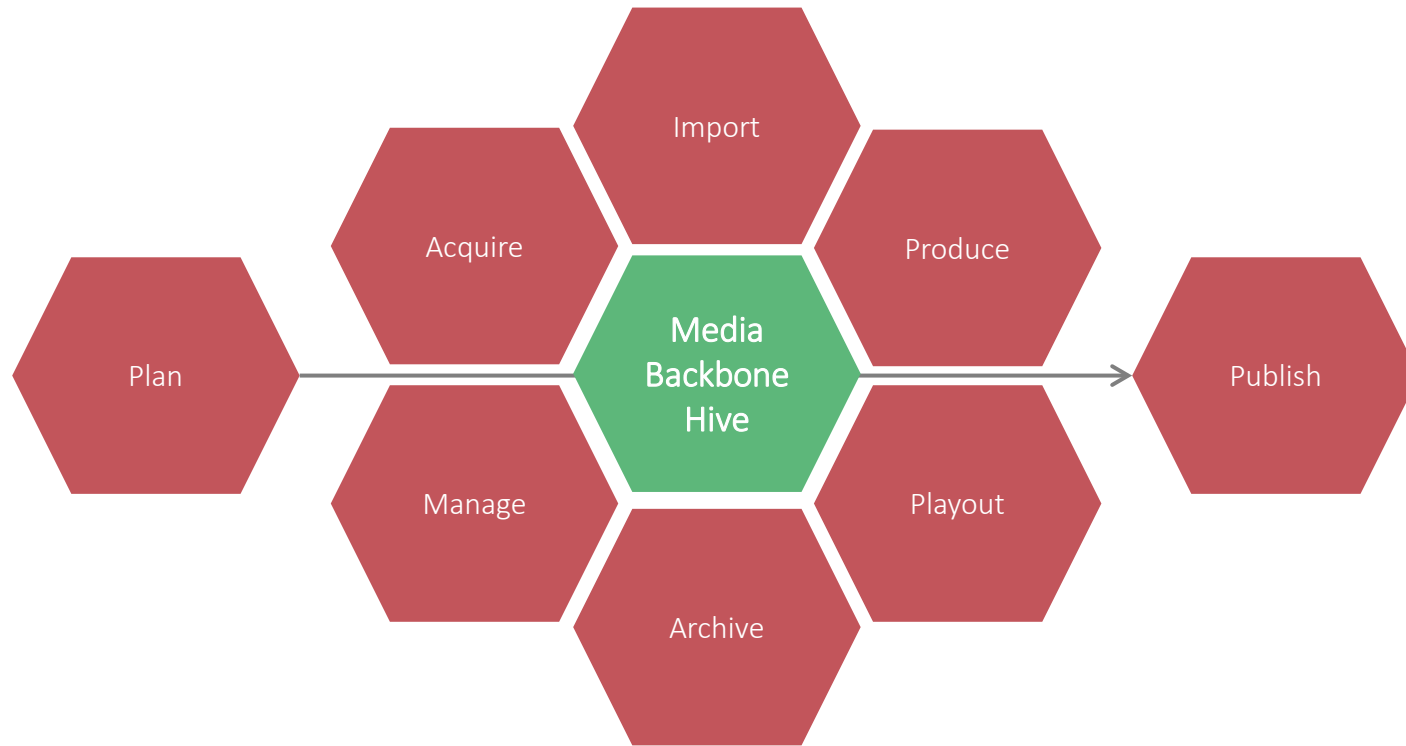
By switching to an **internet technology** focus, we have created a new platform equal to that used by big industry players.

A **fundamental change** in the broadcast platform architectures.



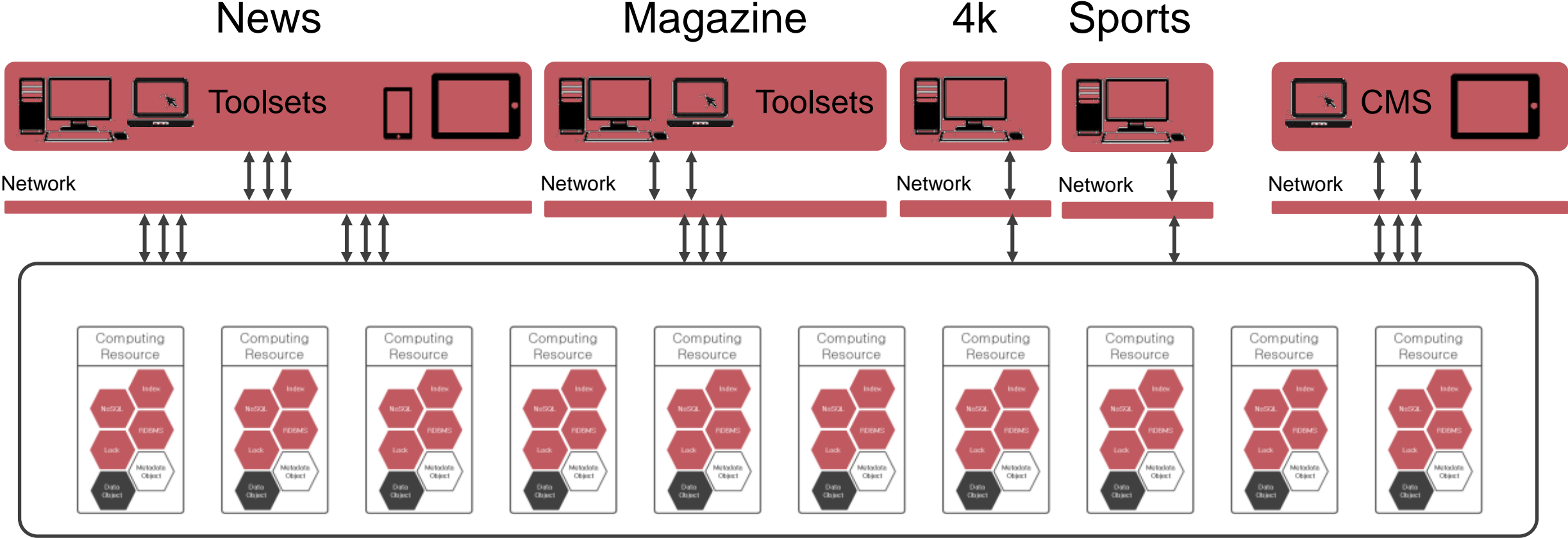
Media Backbone Hive

A cost effective and highly scalable Unified Media Content Platform supporting multiple production and publishing toolsets

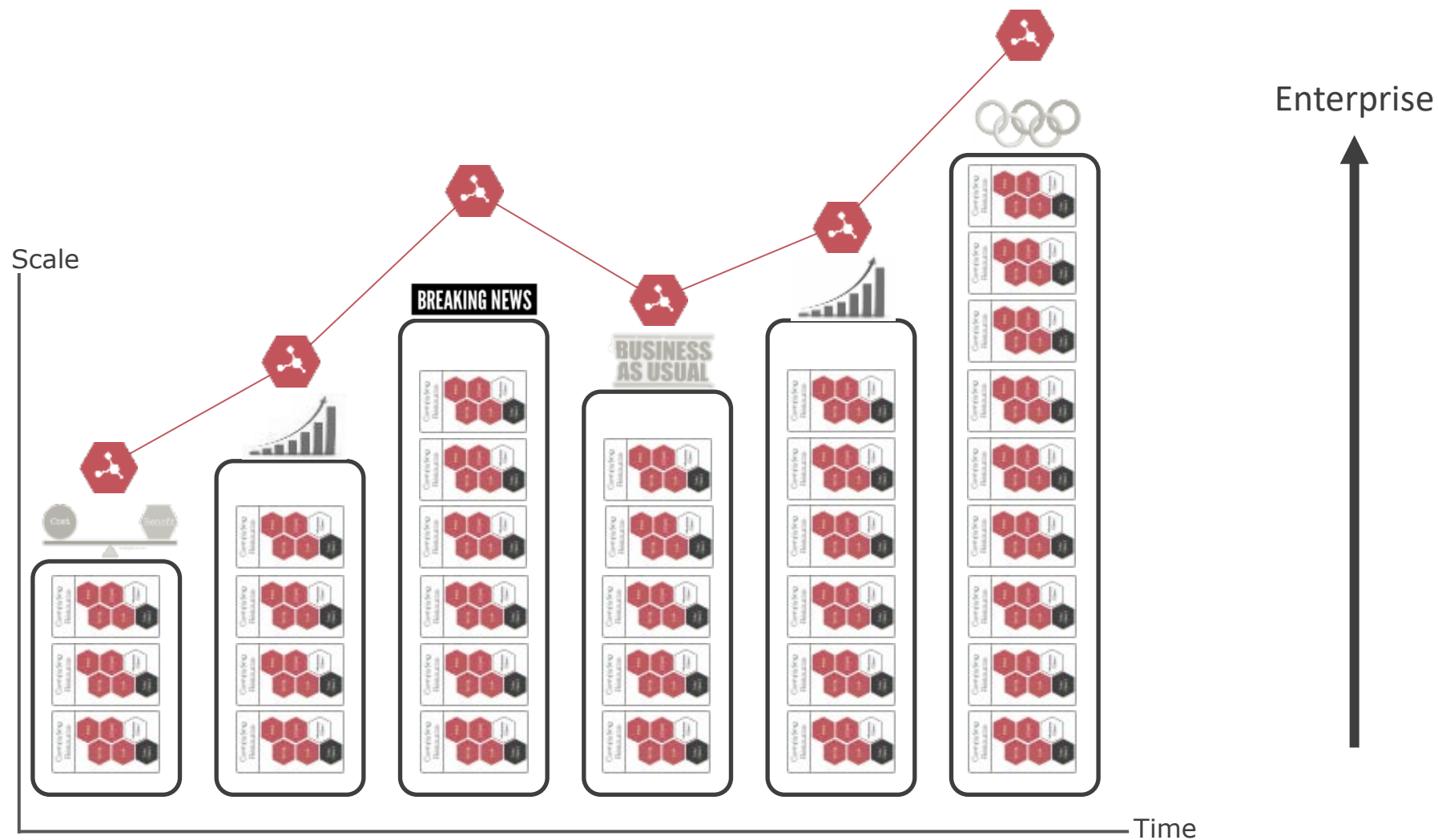


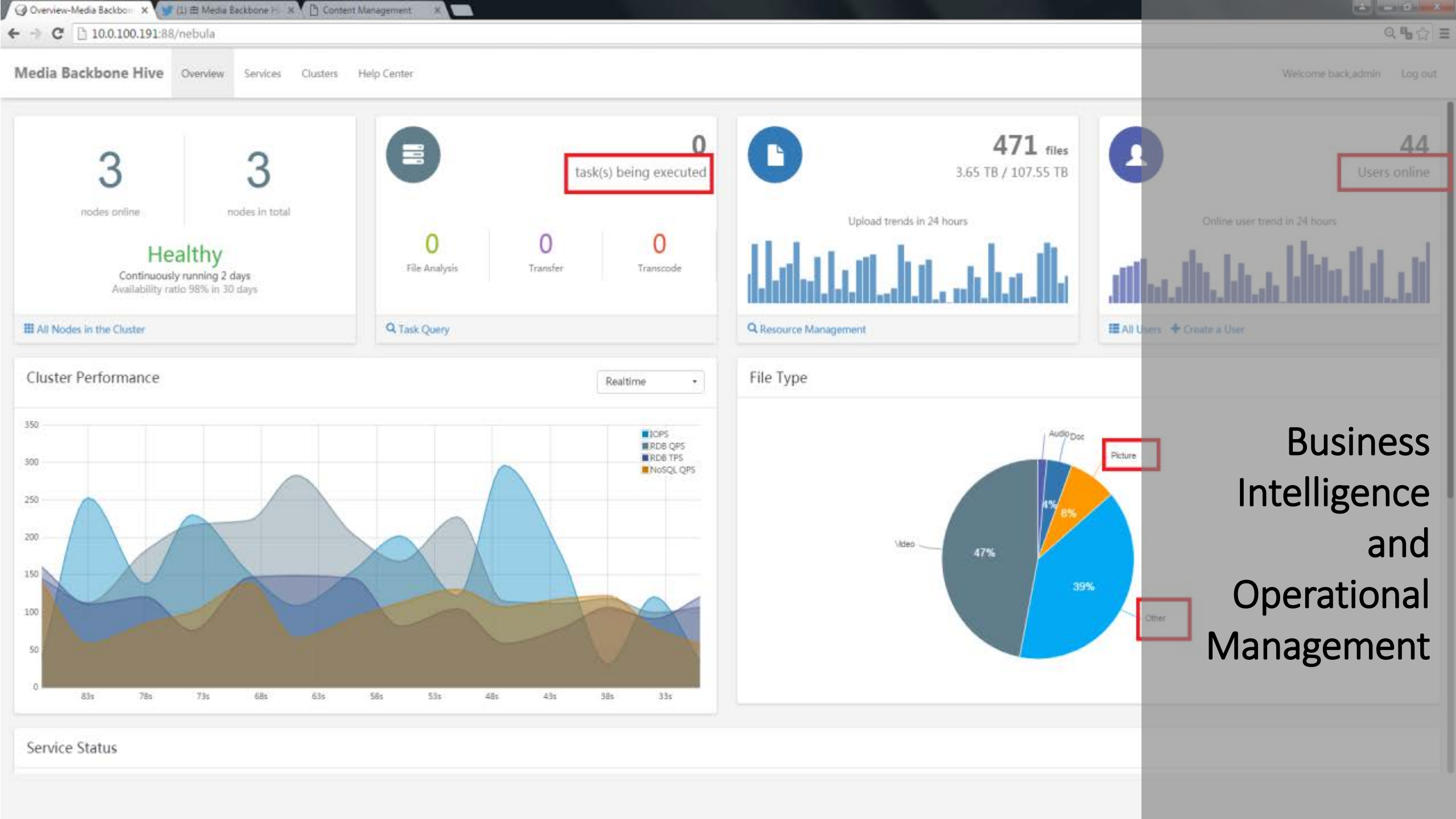
- Streamlined camera-to-archive production workflow
- Integrated solution
- Dynamic pay-as-you-go system for scaling and functionality (up as well as down)
- Adaptable, Open and Smart Platform
- Internet/mobile first workflows that flex with digital 'trends'
- A recognized universal toolset designed for journalists
- Driving a lower TCO

Unified Content Platform



Affordable and Scalable





471 files

3.65 TB / 107.55 TB

Upload trends in 24 hours

Resource Management

44

Users online

Online user trend in 24 hours

All Users | Create a User

Cluster Performance

Realtime

Cluster Performance chart showing metrics over time (83s to 33s). The chart displays four data series: IOPS (blue), RDB QPS (dark blue), RDB TPS (light blue), and NoSQL QPS (brown). The Y-axis ranges from 0 to 350. The X-axis shows time intervals from 83s to 33s. The chart shows significant fluctuations in IOPS and RDB QPS, with peaks around 250 and 300 respectively. RDB TPS and NoSQL QPS remain relatively stable, with RDB TPS peaking around 150 and NoSQL QPS around 100.

File Type

File Type pie chart showing the distribution of file types: Video (47%), Picture (8%), Other (39%), Audio (4%), and Doc (1%).

Service Status

Business Intelligence and Operational Management

ODA Generation 2

Delivering safe, long-term storage, whilst providing instant access to all your files, opening up a new range of storage workflows.

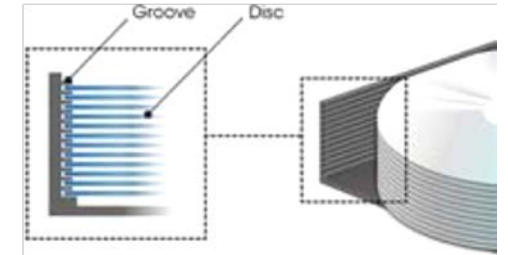
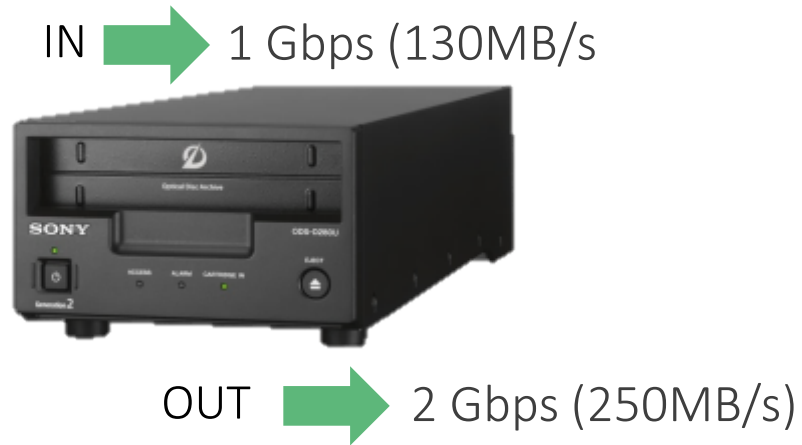


Optical Disc Archive

SONY

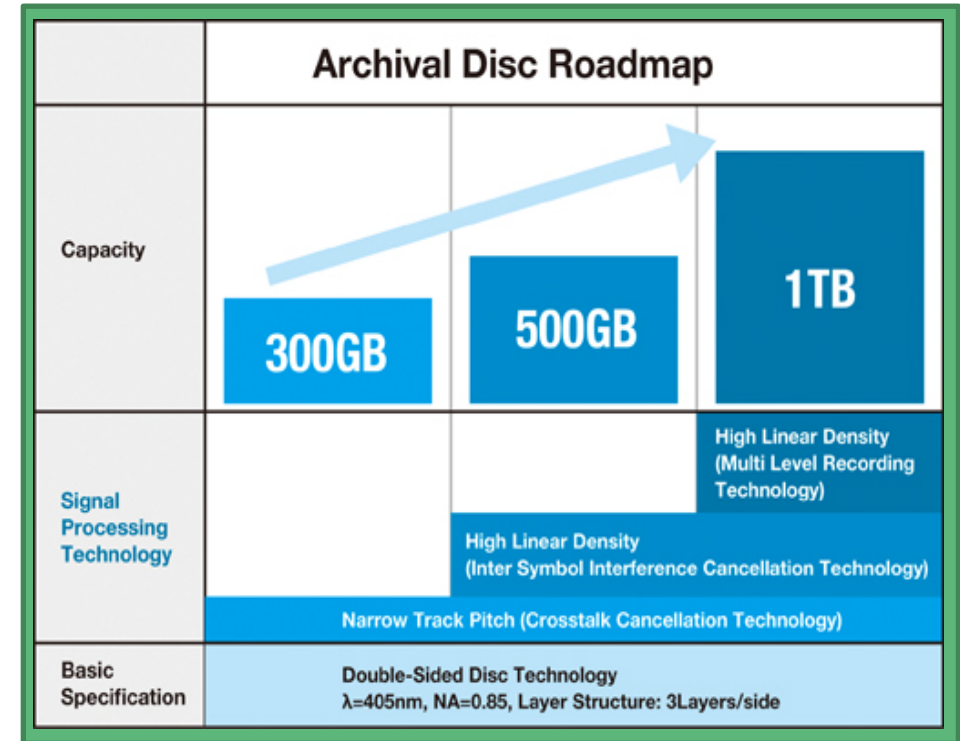
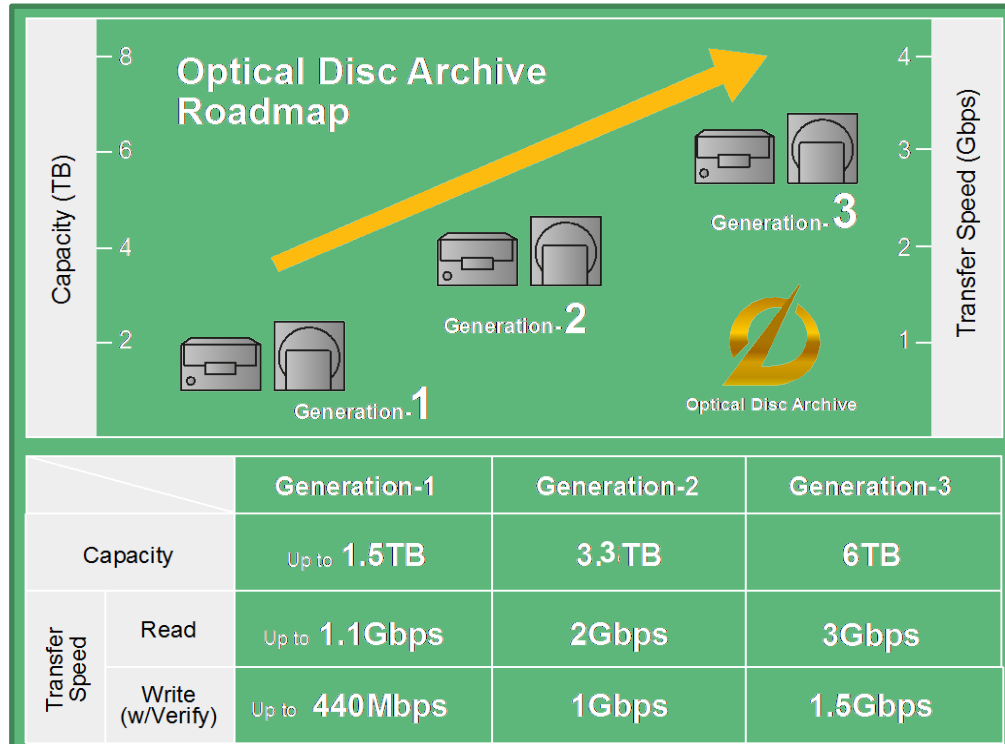


ODA Generation2



- 1 Cartridge
- 11 x Archival Disc
- UDF Open format
- 8 lasers that Verify and Parity for added security
- Write speed in 1 Gbps data In and read speed out 2 Gbps data
- Seen by Windows, Mac OS and Linux as a simple disk volume

ODA Roadmap



What's coming: Media Backbone Navigator X

Powerful, yet affordable content management and workflow solution that's a perfect fit for today's smaller sized production environments.



What's coming : XDCAM AIR



Find out more at
www.pro.sony.eu/ibc

