

### vSolution Cynap systems: Collaboration & wireless presentation solutions



### Collaboration, presentation & knowledge sharing

When you've got something to say, we believe it is important that getting your message across and making an impact should be as easy as possible.

Our aim is to help you to explain it better, to give you the freedom to share your knowledge and collaborate with others - however you want, and whenever you want, when your audience is in the same room or on the other side of the world.

Because knowledge matters - to all of us.



Just like in the human brain where synapses are essential for quick processing and transmission of information, Cynap and Cynap Core are unique, powerful, and flexible systems, that give you instant access to information of all types from any source.

VSolution





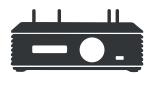
### Connecting media connecting minds

"Cynap is a powerful collaboration system that enables high performance presentation, recording, and distribution of all types of multimedia content material."

Douglas Marsland - Head of Audiovisual Services. Heriot-Watt University, Edinburgh, UK.

## Choose your Cynap system!

VS



**CYNAP** 

### **Centrepiece of** the modern classroom & meeting room









3

IP Stream send/receive





Web-

casting



Input



Web

conferencing

powerful all-in-one wireless collaboration and presentation system, Cynap comes with media player, web conferencing, recording and streaming, BYOD wireless screen sharing, and annotation functionality. It is an ideal centrepiece for new and adapted classrooms and meeting spaces.



**CYNAP CORE** 

### Compact collaboration & presentation solution



screen sharing



Annotation

Document & Media Player





receive



ynap Core is a compact, easy to use collaboration system, providing 'core essential' collaboration features. Its wireless BYOD screen sharing, media player, plus annotation and whiteboard features make it an ideal add-on to existing room infrastructure.

#### 532 Astrometry and Cosmology

where  $R_0$  is the distance of the local standard of rest from the gi  $\omega(R)$  is the circular angular velocity of the Galaxy at R, and  $l^{n}$  a pectively, the galactic longitude and latitude. Conversion for galactic coordinates were given in Sect 5.1.5. The p the celestial object in galactic longitude is

$$\mu = \frac{1}{4.74} \left[ -\frac{1}{2} R_0 \left( \frac{d\omega}{dR} \right)_{R=R_0} \cos \left( t^{\mu} - \frac{1}{2} R_0 \left( \frac{d\omega}{dR} \right)_{R=R_0} - \omega (t) \right] \right]$$

where  $\mu$  is in seconds of arc per year. Cort's constants of differ rotation, A and B, are given by (SCHMIDT, 1960

$$A = -\frac{1}{2} R_0 \left(\frac{d\omega}{dR}\right) = 15 \text{ km sec}^{-1} \text{ kpc}^{-1}$$

# Technology for modern working & learning

Never before has success in business been so dependent on effective knowledge sharing and collaboration between employees.

In educational institutions, successful learning depends on the effective implementation of innovative and creative teaching methods.

We support effective communication and collaboration with our technologically advanced but outstandingly easy to use Cynap solutions.

# Cynap: Inspiring engagement, interaction & collaboration



CYNAP



### Media player: Instant access to all your data

Cynap plays, displays, records, and streams any media. Access your data easily via cloud, network drive, mobile device or HDMI in – even your laptop is no longer essential – you can simply bring your content on a USB stick, or download it directly from the cloud!



### Web conferencing: Everybody. Anywhere. Anytime!

A professional WebRTC web conferencing solution is provided, which enables all multi-window content displayed on Cynap to be transmitted to remote users. Users with a Skype for Business enabled Office 365 account can also make point to point Skype for Business calls as part of our optional Office 365 Feature Pack.



### Bring your own device (BYOD): App-free, dongle-free mirroring!

Simply connect and share your screen using the wireless technology that's built into your own mobile device. Our wireless BYOD solution suits all iOS, Android, Windows and Mac devices - because in contrast to some solutions, we provide full support for AirPlay, Chromecast, and Miracast screen mirroring. We've also made it super easy to connect and control Cynap from your laptop, smartphone or tablet using any current web browser.

### Webcasting: Live and on-demand video!

Our optional Webcasting Feature Pack makes it simple to stream your lecture or meeting content for live or on-demand viewing via a Wowza or IBM cloud Video

(Ustream) streaming server or to YouTube or Facebook for live streaming. Audiences can watch your videos anytime - from anywhere they choose.

### Capture your content: & record to mobile devices

Cynap lets you record all your multi-window, multimedia presentation, training and lecture content. Everything is captured in high definition and saved internally - perfect for use as part of your online educational program. In addition, our unique vSolution Capture app lets students or work colleagues receive and record a stream of on-screen content material onto their own mobile devices.

### Annotation & Whiteboard: Capture your big ideas!

It's easy to create extra content material using our built-in digital whiteboard and annotation features. Multiple users can annotate on-screen at the same time and you can even save your notes - together with the other recorded materials.

### Office 365 Feature Pack: Collaboration made easy

The Office 365 Feature Pack incorporates a Skype for Business client into Cynap, together with access via Cynap to other popular Office 365 apps such as Word, Power-Point, Excel, Outlook, and OneNote (active Office 365 account required). All your files are easy to open, work on collaboratively, and share with teammates.

## Cynap Core: Core essentials for collaboration & presentation!



Cynap Core provides the core essential features you need for effective collaboration, and wireless presentation. With the same user-friendly technology, high performance processing, and enterprise-grade security features you'll find throughout our product line, with Cynap Core we've engineered a powerful, compact, and easy to use collaboration system - the perfect addition to existing infrastructure in classrooms, meeting rooms, and huddle spaces everywhere. For larger active learning classrooms and collaboration spaces where multiple workstations are required, multiple Cynap and Cynap Core systems can be integrated into network infrastructure using our vSolution MATRIX feature pack, providing a truly scalable, high performance AV over IP collaborative working and learning environment.

# App-free, dongle-free screen sharing!



Simply connect and share your screen using the wireless technology that's built into your own mobile device. Our wireless BYOD (bring your own device) solution suits all iOS, Android, Windows and Mac devices - with full support for AirPlay, Chromecast, and Miracast screen mirroring.

# Capture your big ideas!



It's easy to create extra content material using our built-in digital whiteboard and annotation features, and multiple users can annotate on-screen at the same time if required.

# Display & share your files easily



Access, display, and share your data on-screen easily from cloud, network drives or mobile devices – even your laptop is no longer essential – just bring your content on a USB stick, or download it directly from the cloud!

# Enterprise level security



Security is a key consideration when introducing a wireless collaboration solution into your organization. Our secure Linux system keeps you virus and malwa-re-free, and powerful security tools encrypt your data over both wired and wireless connections.





## #knowledgematters

# vSolution MATRIX: Networked AV-based technology for active learning

vSolution MATRIX is an AV over IP-based collaboration solution from WolfVision, which uses multiple Cynap / Cynap Core units to stream video and audio between multiple screens using existing network infrastructure.

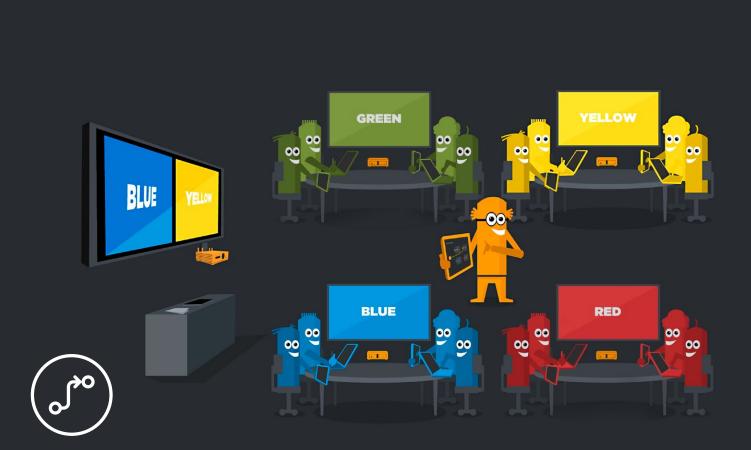
Available as a feature pack upgrade for Cynap systems, it is ideal for active learning classrooms, training rooms, and courtrooms of all sizes, and for other applications where multiple display screens are deployed to leverage collaborative learning and working.

A single feature pack enabled Cynap unit, designated as the 'main' system in the room, is connected to multiple workstations with either a Cynap or a Cynap Core system installed. Content is shared between connected monitors and the main screen in the room



with all processing performed by the installed Cynap systems themselves. This eliminates the need for additional encoding/decoding hardware.

Enterprise level encryption ensures secure delivery of content materials between workstations, and this scalable, cost effective, presentation and collaboration solution gives all the performance, and reliability associated with traditional AV distribution methods.



# Easy drag & drop control of multiple screens

Green

Blue



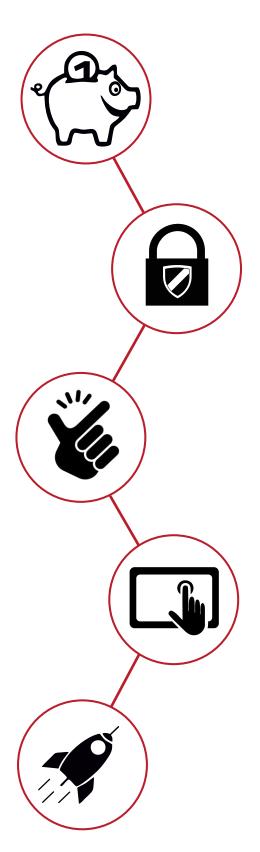
A Cynap system at every workstation ensures an intuitive and easy-to-use collaborative working environment for all users, and the simple drag and drop interface enables content to be moved effort-lessly between different screens in the room.

The Room View is used to control pushing and pulling of content between displays, and flexible configuration settings enable up to twenty workstations to be configured using either names, numbers or colours, to exactly match the actual layout of individual learning spaces.

Yellow

Red

## vSolution MATRIX key benefits



### Cost-effective installation

Using an existing IP network for transmission of AV signals means that there is no longer a need to maintain separate AV infrastructure. Cynap systems do not need additional encoding / decoding hardware which also means a reduction in hardware purchasing costs. Configuring vSolution MATRIX for Cynap also means that cabling requirements are reduced.

#### Enterprise level security features

Network security is an important factor when introducing a wireless collaboration solution into your organization. We provide a comprehensive, configurable set of security features, ensuring that vSolution MATRIX meets the security requirements of every organisation.

#### Easy administration and maintenance

Selecting Cynap and Cynap Core systems for your active learning classroom means less hardware, more straightforward installation plus reduced ongoing maintenance. You also have the flexibility to scale up or down easily in the future as required.

### Simple to use / Drag & drop control

A Cynap system at every workstation ensures an intuitive and easy-to-use collaborative working environment for all users. The simple

drag and drop interface enables content to be moved effortlessly between different screens in the room.

#### High performance system

Intelligent, optimised processing of streams, ensures high quality video and audio with low latency, and a moderate bandwidth requirement. Cynap systems configured with the vSolution MATRIX feature pack provide all the performance and reliability associated with traditional AV distribution methods.



## **Technical specifications**



### Protect your data!

Network security is a key consideration when introducing a wireless collaboration solution into your organization. We use the following technology to keep your data safe:



**High level** secure Linux system



protection



**Enterprise level** encyption



802.1x secure LAN and WLAN authentication

**HTTPS** encrypted connections



Feature lock options

WolfVision systems, software and apps are regularly updated. For the latest detailed information on new innovations, features, and functionality, please visit our website: wolfvision.com

Cynap Remote Control

erating system tput resolutions	Linux, 8GB memory, 64GB internal storage	Linux, 8GB memory
tput resolutions		Enax, odd monory
	Up to 4K UHD, 2160p60 (4.2.0.), 2160p30 (4.4.4), 1080p60 (4.4.4)	1080p60 (4.4.4), 1080p30 (4.4.4)
mpatible device operating systems	iOS, Android, Mac OS, Windows, Windows Mobile, and all HTML5 supported browsers	iOS, Android, Mac OS, Windows, Windows Mobile, and all HTML5 supported browsers
oported apps/software	vSolution Capture, vSolution Connect, vSolution Cast, vSolu- tion Control, vSolution Link	vSolution Connect, vSolution Cast, vSolution Control, vSolution Link
oported image file formats	GIF, JPEG, BMP, PNG	GIF, JPEG, BMP, PNG
oported document file formats	PDF, Word, PowerPoint, Excel, Text, HTML	PDF, Word, PowerPoint, Excel, Text, HTML
·······	•••••••••••••••••••••••••••••••••••••••	
oported video file formats	AVI, WMV, MOV, MP4, DivX, MKV, M4V, OGV	AVI, WMV, MOV, MP4, DivX, MKV, M4V, OGV
oported audio file formats	MP3, WMA, MKA, OGA, OGG	MP3, WMA, MKA, OGA, OGG
oported mirroring protocols	AirPlay, Miracast (no HDCP support), Chromecast, vSolution Cast (up to 30fps)	AirPlay, Miracast (no HDCP support), Chromecast, vSolution Cast (up to 30fps)
x. no. of devices displaying material on-screen	4	2
al screen function	Yes	-
x. receiver connections to Cynap via vSolution Capture app	Virtually unlimited (depends on network infrastructure)	-
eless device mirroring	Yes	Yes
cal streaming	Yes (Unicast/ Multicast), RTP, RTSP	-
bcasting	Yes, to Wowza, IBM Cloud Video (Ustream) , YouTube and others (e.g. Facebook) via optional Webcasting Feature Pack	-
cal video recording	Yes, selectable up to 1080pHD, 30fps, .mp4 file format	-
pture agent	Yes, via optional Opencast Capture Feature Pack	-
oud services	Yes, Google Drive, Dropbox, Box, Jianguoyun, OneDrive, WebDAV protocol	Yes, Google Drive, Dropbox, Box, Jianguoyun, OneDrive, WebDAV protocol
cess to Office 365 apps	Yes, via optional Office 365 Feature Pack	-
cess to network drives	Yes	Yes
cument and media player	Yes	Yes
		•••••••••••••••••••••••••••••••••••••••
iteboard and annotation	Yes	Yes
esentation modes	Protected Mode, Open Mode	Protected Mode, Open Mode
namic on-screen content arrangement	Yes	Yes
b conferencing	Skype for Business via optional Office 365 Feature Pack, WebRTC	-
stomizable background image	Yes	Yes
crypt and save personal user settings	Yes, save onto USB stick	Yes, save onto USB stick
egrated web browser and screensaver	Yes, with personalized homepage & bookmarks	Yes, with personalized homepage & bookmarks
leo input	HDMI x2 (HDMI with HDCP 1.4)	HDMI In not supported (frame grabber can be used to connect to HDMI source if required)
BaseT 1.0 input	Optional x1 (can be used only when HDMI input 2 is not in use)	
eo output	HDMI x2 (HDMI with HDCP 1.4)	HDMI x1
BaseT 1.0 output	Optional x1 (can be used only when HDMI output 1 is not in use)	-
dio	Line in / Line out (unbalanced, 3.5mm mini jacks)	Line in / Line out (unbalanced, 3.5mm mini jacks)
B ports	Rear USB 3.0 ports x4, front USB 2.0 port x1 Yes, 2x 1GigE	Rear USB 3.0 x4, Front USB 2.0 x1 Yes 2x 1GigE
etooth device discovery	Yes	Yes
	•••••••••••••••••••••••••••••••••••••••	
AN standards	802.11 ac/a/b/g/n (2.4 and 5GHz), up to 867Mbps	802.11 ac/a/b/g/n (2.4 and 5GHz), up to 867Mbps
twork protocols	TCP/IP, FTP, HTTP, HTTPS, SNTP/NTP, SSL, SSH, UDP	TCP/IP, FTP, HTTP, HTTPS, SNTP/NTP, SSL, SSH, UDP
configuration	DHCP, Static (IP address, Subnet mask, Default gateway, DNS server), Interface priority	DHCP, Static (IP address, Subnet mask, Default gateway, DNS server), Interface priority
curity encryption for LAN	IEEE 802.1x	IEEE 802.1x
curity encryption for WLAN	WEP, WPA2, WPA2 Enterprise or IEEE 802.1x	WEP, WPA2, WPA2 Enterprise or IEEE 802.1x
IS encryption	Yes	Yes
ernal controlling	Remote control with gyro sensor function, web interface, Visualizer, multi-touch display, room management system,	Web interface, Visualizer, multi-touch display, room manage- ment system, keyboard and mouse, optional remote control
nensions (L x W x H)	keyboard and mouse, device status display 245mm x 245mm x 79mm (9.65" x 9.65" x 3.1")	with gyro sensor function 203mm x 196mm x 67mm (7.99" x 7.71" x 2.63")
wer consumption	Max. 105W	Max. 80W
ight	2530g (5.58lb) standard configuration	1840g (4.05lb)
tional accessories	19" rack unit mounting frame, under desk mount, USB hub,	Optional remote control, 19" rackmount, VESA mount (75mm /100mm)
	Remote control nower supply entennes HDML& LAN cobles	Power supply antennas
luded accessories	Remote control, power supply, antennas, HDMI & LAN cables 3 years (optional warranty extension up to 5 years)	Power supply, antennas 3 years (optional warranty extension up to 5 years)
nen wer	nsions (L x W x H)	Visualizer, multi-touch display, room management system, keyboard and mouse, device status display   nsions (L x W x H) 245mm x 245mm x 79mm (9.65" x 9.65" x 3.1")   r consumption Max. 105W   t 2530g (5.58lb) standard configuration 2655g (5.86lb) with HDBaseT (input & output)   nal accessories 19" rack unit mounting frame, under desk mount, USB hub, HDBaseT-TX module

# Find out more about WolfVision solutions

WolfVision is a worldwide provider of systems and services to leading universities, businesses, schools, and other organizations. Acknowledged as a 'technology leader' in the presentation solutions market, WolfVision takes the lead, setting standards worldwide for innovative, reliable, userfriendly, high performance presentation, collaboration, and knowledge sharing solutions.

#### Streamline your technology

There's no longer any need for racks full of AV equipment simplify your technology and use Cynap's flexibility to configure a cost effective, all-in-one, secure presentation and collaboration solution that really suits the needs of your own organization you don't have to settle for less - so talk to us now!

Driving the Creation of Knowledge

All units made in Austria, Europe.

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Printed in Germany, January 2018