



Tracking Master



Customization

Camera Tracking

AV Automation

Workflows



<https://www.youtube.com/watch?v=qRsBCuSoRKQ>



Typical challenges in auditoriums and our solution

Video based systems



TrackingMaster works ...

- ... with images of a person in the background
- ... with precise depth detection
- ... at all lighting conditions
- ... with all clothing
- ... also without seeing the speaker's face
- ... also when people walk through the video image
- ... in szenarios with multiple people
- ... without filming a person (data protection)
- ... system knows where persons are without camera filming



Audio based systems

TrackingMaster works...

- ... when it's quiet
- ... when it's loud
- ... when multiple people talk
- ... without requirement of presets
- ... with high precision (mm)
- ... with clip-on microphones that deliver highest audio quality



Tino Tschiesche, deputy director of the Multimedia Center (MMZ) at Friedrich Schiller University Jena

”We were faced with the challenge of planning a lecture hall that would be suitable for a wide variety of recording and streaming scenarios without the need for a control room, and without distracting the professors by complicated operation. With the jointly developed tracking system, we succeeded with excellence.“



The AVard
2023
Winner

Products:
Education

VST TrackingMaster
Version 1.5.1 Ruby

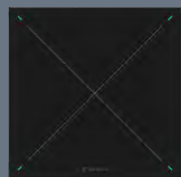
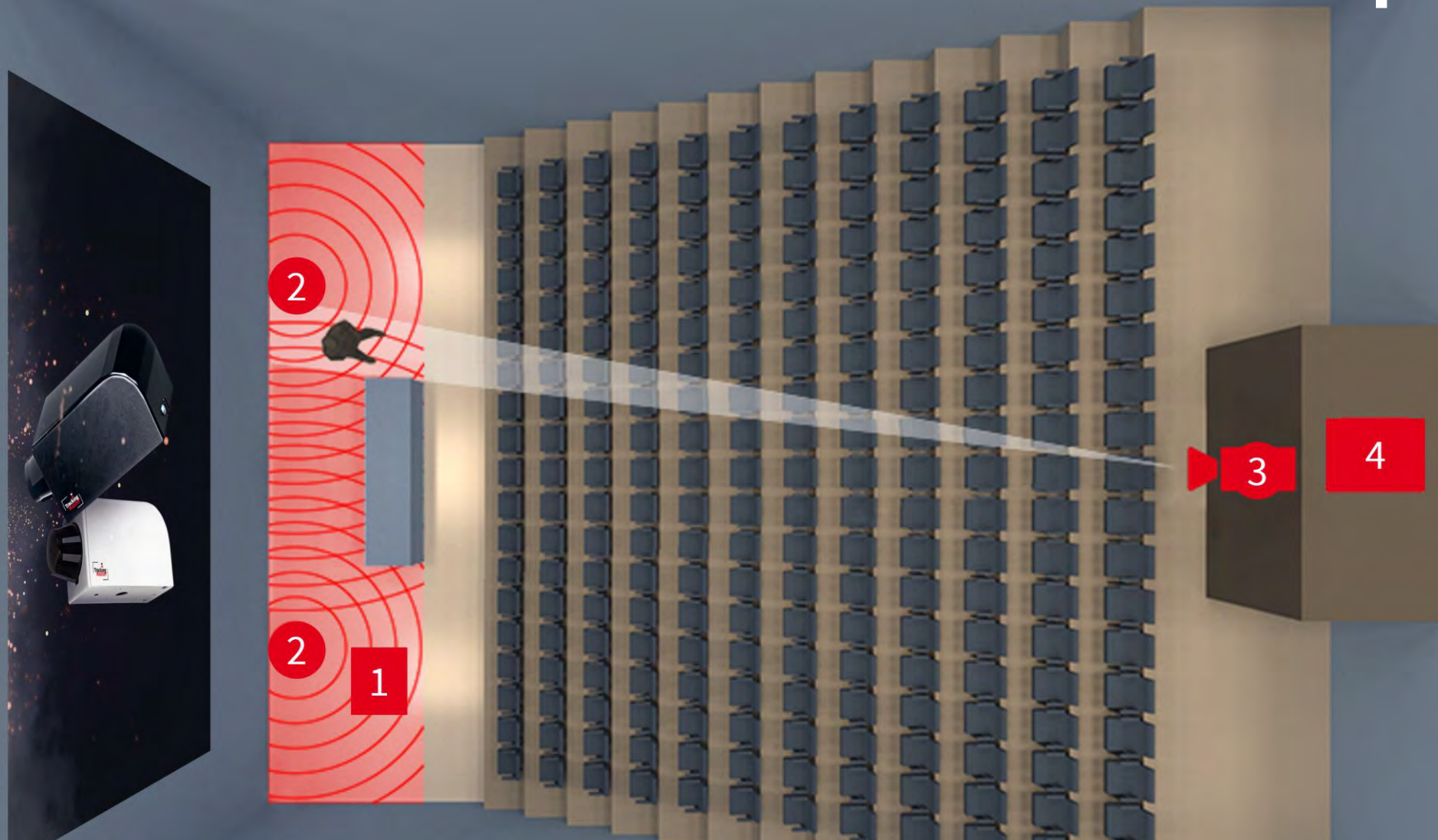
THE **AVARD**
THE PROAV AWARD GERMANY

References

- | | | |
|---|--|---|
| 01 Jena
Friedrich-Schiller-Universität | 06 Bremen
Universität Bremen | 11 Magdeburg
Otto-von-Guericke-Universität |
| 02 Ilmenau
Technische Universität | 07 Konstanz
Universität Konstanz | 12 Hannover
Medizinische Hochschule & Leibniz Universität |
| 03 Göttingen
Georg-August-Universität | 08 Freiburg
Pädagogische Hochschule | 13 Wolfenbüttel
Ostfalia Hochschule |
| 04 Fulda
Hochschule Fulda | 09 Stuttgart
Hochschule für Technik | 14 Berlin
Humboldt-Universität |
| 05 Friedberg
Technische Hochschule Mittelhessen | 10 Bochum
Technische Hochschule Georg Agricola | 15 Linz
Johannes Kepler Universität |



- 1 Tracking zone
- 2 Lidar-Sensors
- 3 PTZ camera
- 4 Appliance



VMS



TrackingMaster – included

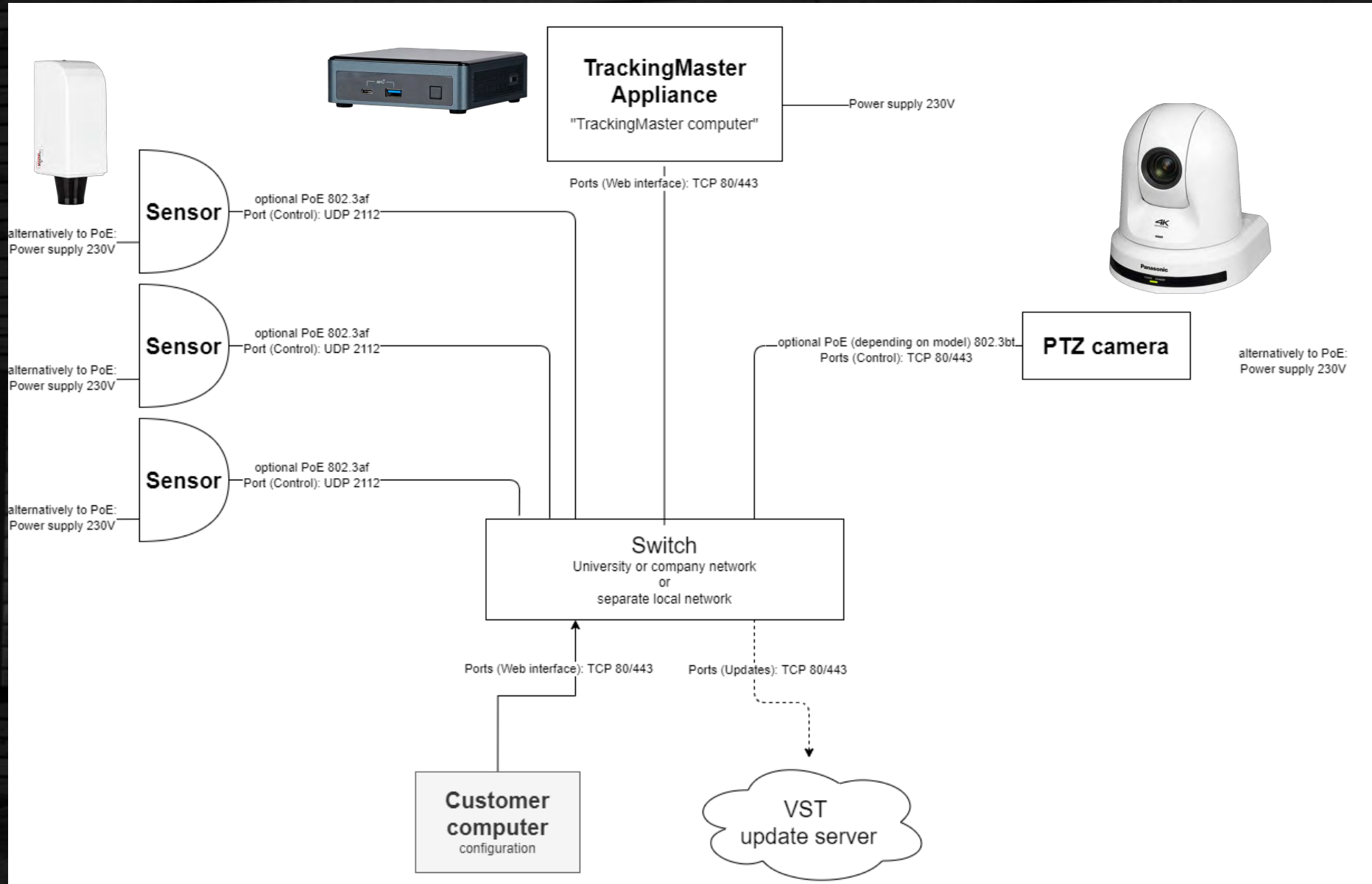


appliance
with 2 or more lidar sensors

extra

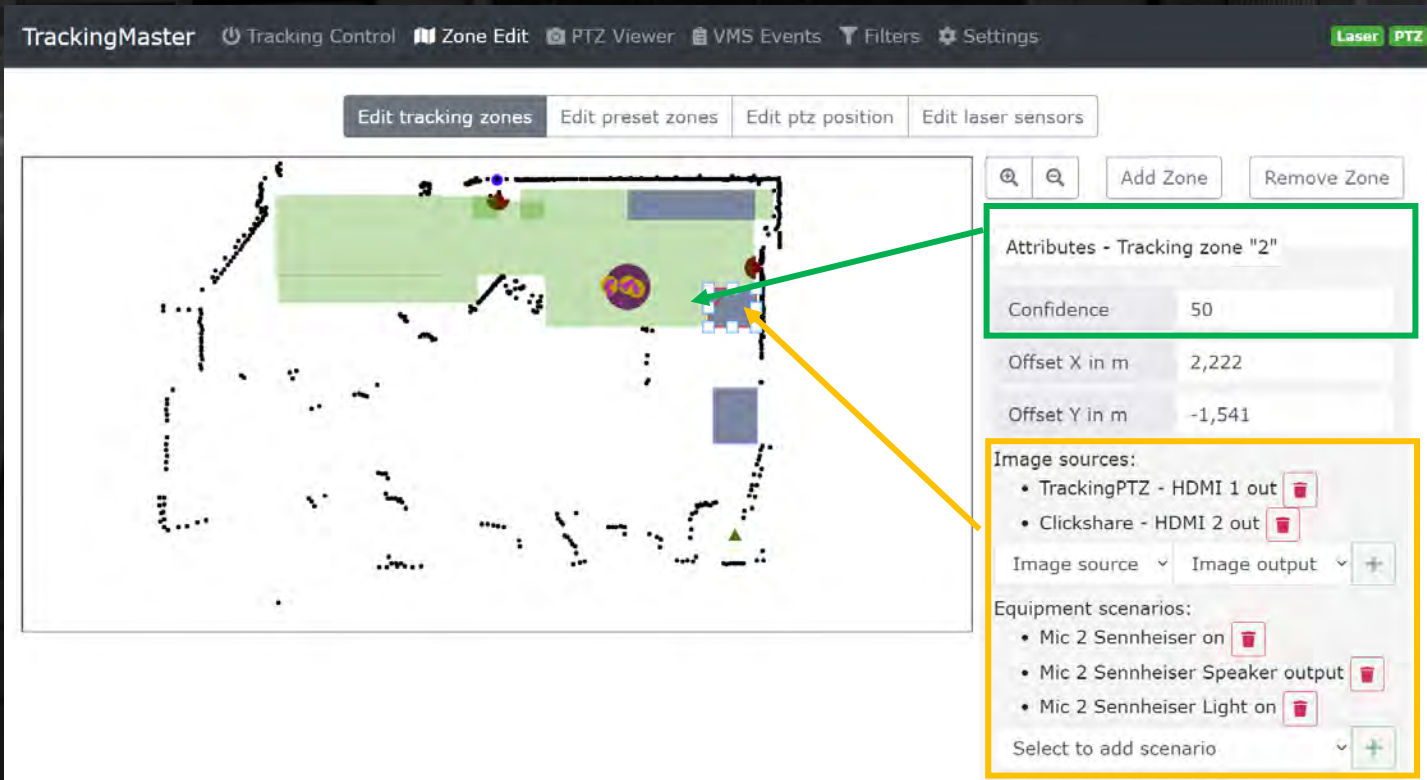


- compatible* PTZ cameras
- audio devices
- media control
- visualizer
- etc.



- Perpetual licence (service subscription available)
- Support and R&D in Germany
- AI object detection (machine learning)
- REST-API for seamless integration – all functions supported

Network status for Sensors & PTZ allow easy troubleshooting



- Trackingzones can be configured flexibly
- Flexible scenarios due to **priorities** ("confidences" 1 - 100), e.g. camera shall always stay on speaker when he is at pult

For **Preset-Zones**, it can be defined what AV technology shall be switched (e.g. image sources, picture-in-picture scenarios, visualizer on/off, lighting speaker desk, etc.)

Technical background:
Your media control requests trigger key status from TrackingMaster

Sales & Installation Tools

Documents for end users

- Flyer DE/EN
- Product data sheet DE/EN
- Tender text proposals DE/EN
- Article(s) Tracking system comparison - Professional Systems



Sales Support

- Sales argumentation
- Project registration & support*
- *system design support (requires foto of room + plan incl. furniture)



Installations Support

- Installation guide
- REST API
- Guide trouble shooting and resolution (up to level end user)
- Configuration support for 1st installation (circa 2h)



Data protection

- Template Info Video Recording
- Concept data protection – How to avoid recording of students (work in progress)



audio 

a division of Audio Pro Heilbronn Elektroakustik GmbH

WHO IS HARMAN?

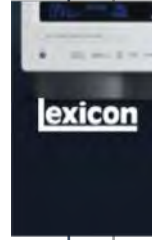
MEET OUR ICONIC BRANDS



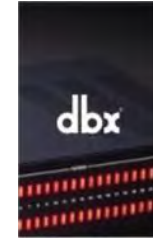
CONNECTED CAR



LIFESTYLE AUDIO



PROFESSIONAL SOLUTIONS



CONNECTED SERVICES



HARMAN PROFESSIONAL SOLUTIONS BRANDED SOLUTIONS



MICROPHONES & HEADPHONES



AKG

SIGNAL PROCESSORS, CONTROLLERS, INTERFACES



Lexicon

dbx

Lexicon

VIDEO & CONTROL



AMX

AMPLIFIERS



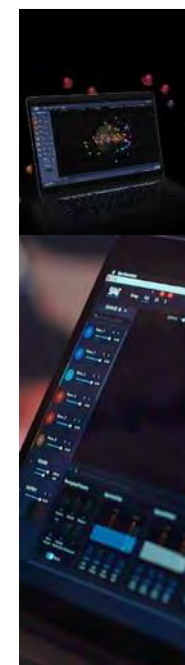
CROWN

SPEAKERS



JBL
PROFESSIONAL

SOFTWARE



FLUX

LIGHTING



Martin

MIXING CONSOLES



Soundcraft

- Samsung and HARMAN

Unparalleled Synergy



Innovation /
R&D

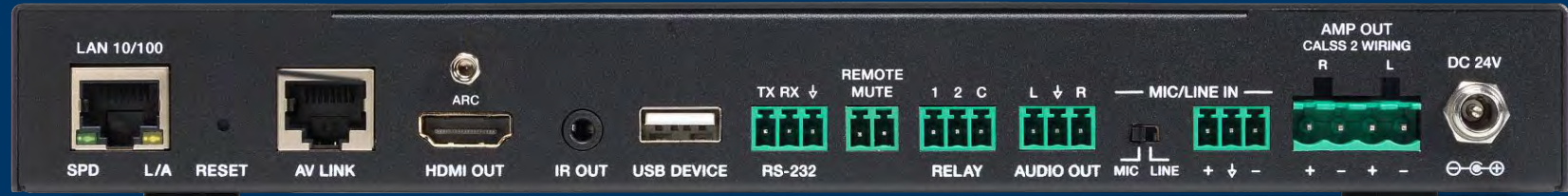


Global Scale



Distribution
Network

TECHNOLOGY POWERHOUSES
MAKING LIVES BETTER







- AMX SVSI N2600S SERIES

New feature overview

Dante AV™

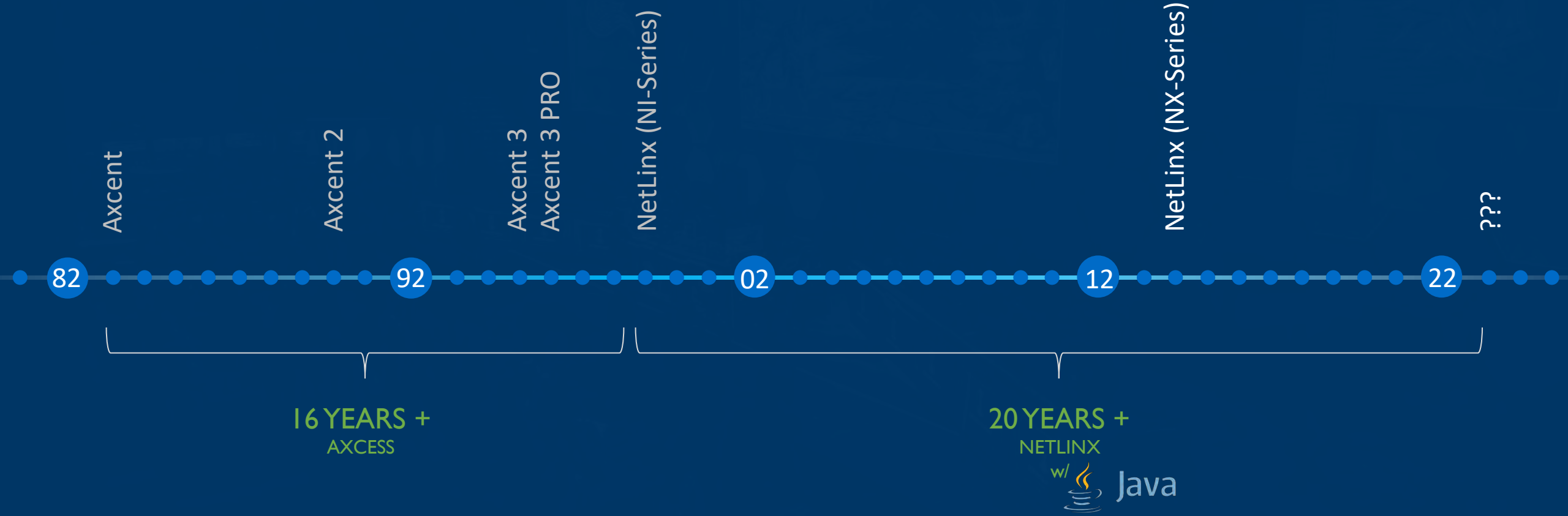
- 2-Ch Dante Audio
- **Dante Controller** supported for configuration and one click routing of all audio and video
- System maintenance, security, and support with **Dante Domain Manager**.

H.265

- 1080p H.265 option for secondary stream
- Adds compatibility with additional services and devices



HISTORY OF CONTROL:





Harman Professional's **powerful** and **secure** next-generation automation **platform**.

Going beyond the traditional capabilities of AV Control, MUSE simultaneously processes MULTIPLE scripting languages, supports No-Code Low-Code capabilities, simplifies routine development tasks, and opens up the possibilities for technicians and IT managers of all skillsets to deliver advanced automation in a modern market

WORK THE WAY YOU WANT TO WORK

YOUR TOOLS. YOUR SKILLS.



STANDARD LANGUAGES

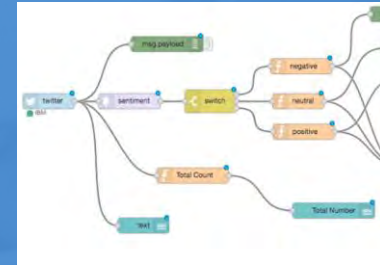


Python
JavaScript
Groovy

SIMULTANEOUS MIXED LANGUAGE



NATIVE NO CODE / LOW CODE



Flow-Based Programming

STANDARD IDE'S

VSCode



Node-RED

SIMULTANEOUS DEVELOPERS



MASS DEPLOY



DO MORE. FASTER.

MORE RESOURCES. LESS FRICTION.



HCONTROL,
ICSP, & HIQNET
DEVICES NATIVELY
SUPPORTED

LEVERAGE STANDARD
DEVELOPER COMMUNITY
SUPPORT

UNLIMITED
SIMULTANEOUS
SCRIPTS

LEVERAGE EXISTING
PANEL DESIGNS
& FILES

DROP IN SCRIPTS
REBOOT NOT REQUIRED

LEVERAGE STANDARD
DEVELOPER COMMUNITY
RESOURCES

COMPATIBLE WITH
1000'S OF AVAILABLE
DUET DRIVERS

MUSE Automator

The screenshot displays the MUSE Automator interface with a dark theme. At the top, there are tabs for 'UI Start Page', 'Streaming Sources', 'Main Menu', 'Automations', 'Apps Page', and 'Camera'. The 'UI Start Page' tab is active. On the left, a sidebar contains a search bar 'filter nodes' and a list of node categories: 'MUSE Automator' (Controller, Status, Event, Command, Navigate, Control Panel, UI Control), 'common' (inject, debug, complete, catch, status, link in, link call, link out, comment), and 'function' (function, switch). The main workspace shows a flow diagram with the following nodes and connections:

- Controller** (blue box) with a red status indicator and text '10.35.88.121:80 disconnected'.
- Menu Button** (blue box) connected to **Open Main Menu** (pink box).
- Conf Call Button** (blue box) connected to **Start Conference Call** (teal box).

Each button node has a red 'unwatched' indicator. The right sidebar shows a tree view of 'Flows' with categories: 'UI Start Page', 'Streaming Sources', 'Main Menu', 'Automations', 'Apps Page', 'Camera', 'Subflows', and 'Global Configuration Nodes'. Below this, a search bar 'Search flows' is present. At the bottom right, a panel for 'UI Start Page' shows a 'Flow' with ID '"bb2e398b62c80dbc"'. The top right corner features 'Sync' and 'Deploy' buttons.

NEXT-GEN integrated controller features

- Updated processor – 10x faster than NX
- Updated memory and storage – eMMC
- Familiar Control Port Counts – map to NX Series
- HControl, ICSP, and HiQnet Translation
- Works with Manager Desktop
- Support for Node-RED Flows Built-In
- Expanded Web Configuration Capabilities
- Secure Linux Platform
- JITC Tested (planned)





SOUNDWEB OMNI SERIES

Processor



512p

Processor



256p

I/O Expander



32e





I/O Expander



16e



SOUNDWEB OMNI SERIES

		DANTE / AES67	DSP	ANALOG I/O (IN x FLEX x OUT)	GPIO (FLEX)
	512p	512 x 512	✓✓	-	8
	256p	256 x 256	✓	-	8
	32e	32 x 32	-	8 x 8 x 8	24
	16e	16 x 16	-	4 x 4 x 4	12



PROCESSORS

512p

512 x 512 Dante/AES67
160 CH. AEC
64 VOIP instances
1TB SSD for media storage



256p

Half of the above



Both devices have

- Enterprise grade network security
- AMX MUSE scripting engine
- 8 GPIO (fully flexible)
- High precision word clock
- BNC Word Clock in/out
- Dual redundant PSU, Dante, & Hcontrol
- 128 ch media engine
- Full color LCD display

THANK | YOU
