

TOA JUST: IN MAC BOILERPLATE

Additional information about the just:in mac Capture Solution for macOS. To be used for RFI, RFP or Web Shop descriptions.

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1 Change Log:

Date	Version	Changed by	Changes
14.10.2024	1.4	MGR	Updates/changes:
			Updated feature set and compatibility matrix for macOS Sequoia
			Added Workflow Diagram
02.09.2024	1.3	MGR	Updates/changes:
			Revised descriptions for better readability
			Updated specifications and descriptions to reflect the current software release.
27.07.2024	1.2	MGR	Updates/changes:
			Updated TOC Sections for better readability
			Revised descriptions for better readability
			Updated specifications and descriptions to reflect the current software release.
12.09.2020	1.1	MGR	Updates/changes:
			Updated TOC Sections for better readability
			Revised descriptions for better readability
13.07.2020	1.0	MGR	Initial Draft

2 Product Description just:in mac

2.1 Title:

ToolsOnAir just:in mac - single/multichannel client-server-based capture solution for macOS.

2.2 SKU:

Licenses: JIM-1-LC, JIM-4-LC, JIM-8-LC

2.3 Ideal for:

- Multichannel client-server-based broadcast recording on macOS with support for SD/HD/UHD resolutions and SDI/HDMI/NDI®/SRT/UDP/ST-2110 input sources.
- Crash, Batch, and Schedule recordings with growing file support.
- Multicamera ISO recording with automatic EDL-to-XML conversion and automatic video/audio timeline alignment within Adobe Premiere Pro, Apple Final Cut Pro and DaVinci Resolve (v.18/19).
- Dual Instance recording (High-Res and Proxy).
- REST API based third-party integrations.

2.4 Description:

just:in mac is a macOS-based client-server multichannel capture solution to record SDI, HDMI, NDI[®], SRT, UDP, ST-2110, VTR and multicamera sources using Crash, Batch, or Schedule recording modes.

2.5 Concept:

Seamlessly integrating into the production workflow of any TV station or post-production facility **just:in mac** captures multiple video sources directly into MOV, MXF OP1a and MP4 containers. **just:in mac** unites single and multichannel recording into one flexible and expandable client-server baseband and IP streams capture solution.

2.6 Reliability & Flexibility:

just:in mac is built for 24/7 deployment and easily adapts to the shifting requirements of time-sensitive broadcast production environments. Featuring multiple destinations for either parallel recording or out-of-storage/network connection loss prevention scenarios, **just:in mac** ensures that your recordings are compliant to broadcast standards, safe and secure. Customizable presets allow operators to quickly switch between commonly used setups. The ability to use two or more concurrent capture instances also makes **just:in mac** the ideal capture solution for MAM integration, where High-Res and Proxy files can be generated at the same time and delivered as a logical package. It is also ideal for growing file editing in combination with industry standard NLEs such as Adobe Premiere Pro or Apple Final Cut Pro (please refer to NLE vendor codec/container compatibility).

Using the integrated XML writer engine, operators can customize XML exports by generating XML sidecar files with descriptive metadata to accompany MOV and MXF generated files. With the addition of Markers support for Adobe Premiere Pro, operators can log marker information while recording and have these markers automatically displayed in Adobe Premiere Pro's timeline for efficient post-production editing.

By using the **TOA REST API** to remotely control the **just:in mac** solution customers, and system integrators gain the flexibility to integrate **just:in mac** into existing media infrastructures with ease.

2.7 Product Deployment:

just:in mac is a true client-server capture solution for macOS. With the built-in video and audio previews and the single/multichannel control application, namely **Just Control**, the operator can control all available capture machines from a single interface. The deployment and configuration of the **just:in mac** solution is straightforward and intuitive and consists of two applications, which can either be installed on a single machine or can get distributed on multiple macOS machines.

The applications are called:

- Just In Engine.app
- Just Control.app

and installed, via Drag-and Drop from the DMG package, in the specific "Applications" folder of the corresponding macOS system. Additionally, the **Just Control** application has a configuration panel ("**Just Control Configuration**"), which is used to perform all **Channel** and **Just In Engine**-related settings.

The **Just In Engine** application has access to the specific Video Hardware Devices (AJA / Blackmagic Design) and/or NDI®, SRT, UDP, ST-2110 format streams and is responsible for the encoding processes and for writing the video and metadata files to the chosen destination(s). Once started, it runs and works in the background, as all settings can be applied within the **Just Control** application. The **Just In Engine** application can be run on the same machine as the **Just Control** application or on a dedicated macOS machine.

The **Just Control** application is the versatile single/multichannel control application for both our capture and playout solutions. With built-in video and audio previews and a feature-aware inspector, the operator can control all available capture and playout channels from a single user interface.

The **Just Control Configuration** panel lists all connected **Just In Engines** and available **Channels** (=Inputs). Within this panel, the **Just In Engine** and **Channel** settings can be adjusted and all kinds of Presets (Capture, Destination, Naming, Metadata, Events) can be created and modified.

2.8 Key Features:

- Available as single or multichannel configurations (depending on purchased licenses).
- Frame accurate Crash, Batch, Schedule as well as Split-While-Recording, Infinite Chunk recording functionality,
 Dynamic Folder Creation and Dropped Frames Strategy.
- Growing File Support in Adobe Premiere Pro, Final Cut Pro (refer to NLE Vendor codec/container compatibility).
- SDI, HDMI, NDI®, SRT, UDP, ST-2110 Input Sources support. HLS (HTTP Live Streaming) output.
- Broadcast Standard Format and Container Support (MOV, MXF, MP4).
- Timecode support for: Computer Time, VTR, LTC over Audio (USB device), Capture card LTC (AJA), SDI Embedded
- Multi-camera production support in combination with the built-in live:cut option.
- Closed Captioning and SCC Sidecar file support.
- Customizable end-of-recording based on timecode entry and support for external timecode sources.
- External Audio Source Processing.
- Bitfocus Companion integration.
- Support for post-recording actions using customizable shell scripts (e.g., FTP upload or MAM connections).
- Support for customizable XML Metadata (XML sidecar files) as well as native QuickTime metadata entries.
- TOA REST API for remote control and third-party integration flexibility.

3 Technical Data (Supported Containers & Codecs):

3.1 QuickTime (PAL, NTSC, HD, UHD/4K):

- XDCAM EX, XDCAM HD (35) XDCAM HD 422 (50)
- Apple ProRes 422, LT, Proxy, HQ
- Apple ProRes 4444 (with alpha)
- H.264
- HEVC (H.265)
- Supported frame rates: 23.976, 24, 25, 29.97, 30, 50, 59.94, 60

3.2 MXF (PAL, NTSC, HD, UHD/4K):

- DVCPRO HD
- IMX 30/40/50
- Apple ProRes 422, LT, Proxy, HQ
- Apple ProRes 4444 (with alpha)
- XDCAM EX, XDCAM HD (35) XDCAM HD 422 (50)
- AVC-Intra 50M/100M
- XAVC-Intra 50M/100M/200M
- XAVC Long-Gop 422
- Avid DNxHD, DNxHR
- Supported frame rates: 23.976, 24, 25, 29.97, 30, 50, 59.94, 60

3.3 MP4 (PAL, NTSC, HD, UHD/4K):

- H.264
- Supported frame rates: 23.976, 24, 25, 29.97, 30, 50, 59.94, 60

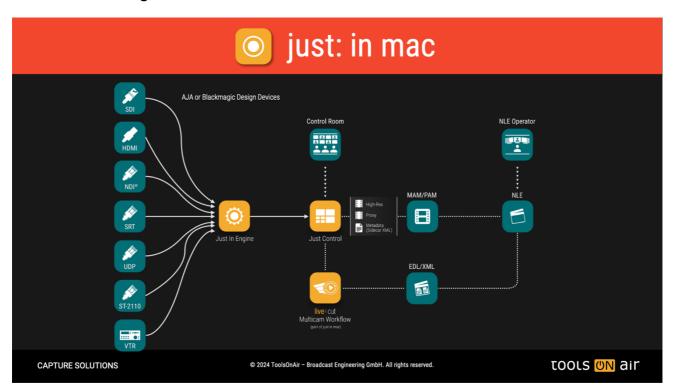
4 System Requirements

- Apple Mac mini, iMac, Mac Studio, Mac Pro 2023 Apple silicon recommended.
- Apple macOS Ventura, macOS Sonoma, macOS Sequoia are recommended.
- Support for AJA and Blackmagic Design ("BMD") video devices (SDI, HDMI, ST-2110-BMD)
- For detailed system requirements, please consult the online user manual or contact ToolsOnAir at https://support.toolsonair.com

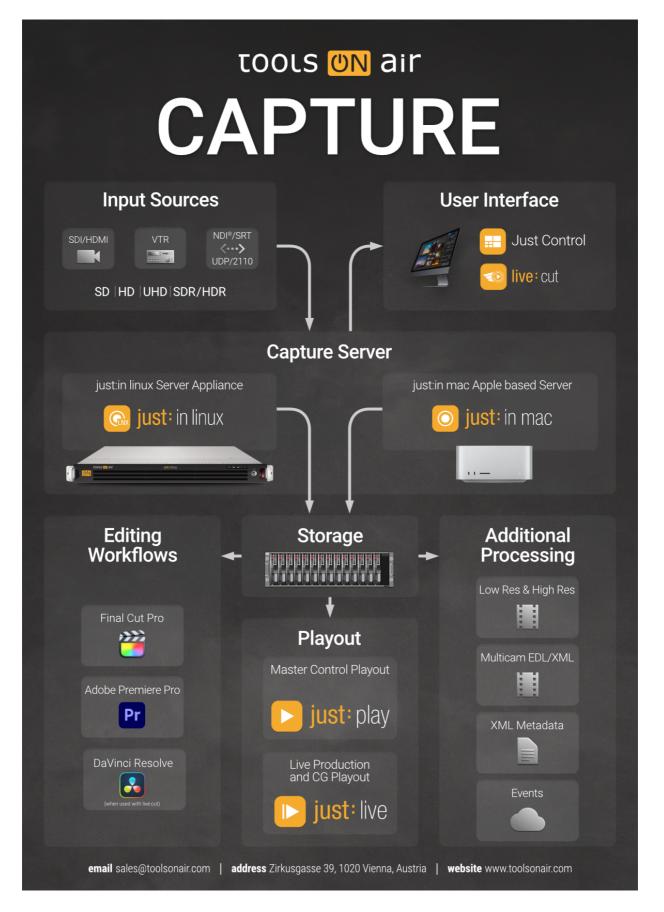
5 Compatibility Matrix

Version	macOS Sequoia (15.x)		macOS Sonoma (14.7.x)		macOS Ventura (13.7.x)		macOS Monterey (12.7.6)		macOS Big Sur (11.7.10)	
	Apple silicon preferred		Intel / Apple silicon		Intel / Apple silicon		Intel / Apple silicon			
6.5	AJA	BMD	AJA	BMD	AJA	BMD	AJA	BMD	Not av	ailable
	17.1.x	14.2.x	17.1.x	14.2.x	17.1.x	12.7.x	17.1.x	12.7.x		
Version	macOS Sonoma (14.7.x)		macOS Ventura (13.7.x)		macOS Monterey (12.7.6)		macOS Big Sur (11.7.10)		macOS Catalina (10.15.7)	
	Intel / Apple silicon		Intel / Apple silicon		Intel / Apple silicon					
6.2	AJA	BMD	AJA	BMD	AJA	BMD	Not av	ailable	Not av	ailable
	17.1.x 12.9		17.0.x	12.9	17.0.x	12.7.x				
Version	macOS Sonoma (14.7.x)		macOS Ventura (13.7.x)		macOS Monterey (12.7.6)		macOS Big Sur (11.7.10)		macOS Catalina (10.15.7)	
	Upgrade to Version 6.x		Intel / Apple silicon		Intel / Apple silicon		Intel / Apple silicon		Intel	
5.5			AJA	BMD	AJA	BMD	AJA	BMD	AJA	BMD
			16.2.6	12.9	16.2.6	12.7.x	16.2.6	12.4.0	16.2.6	11.7
Version	macOS Ventura (13.7.x)		macOS Monterey (12.7.6)		macOS Big Sur (11.7.10)		macOS Catalina (10.15.7)		macOS Mojave (10.14.6)	
	Upgrade to Version 6.x		Intel / Apple silicon		Intel / Apple silicon		Intel			
5.0 - 5.1			AJA	BMD	AJA	BMD	AJA	BMD	Not available	
			16.1.x	12.7.x	16.1.x	12.2.x	16.1.x	11.7		
Version	macOS Ventura (13.7.x)		macOS Monterey (12.7.6)		macOS Big Sur (11.7.10)		macOS Catalina (10.15.7)		macOS Mojave (10.14.6)	
	Upgrade to Version 6.x		Upgrade to Version 6.x		Upgrade to Version 5.5		Intel		Intel	
4.0							AJA	BMD	AJA	BMD
							15.5.x	11.4.x	15.5.x	11.4.x
Version	macOS Ventura (13.7.x)		macOS Monterey (12.7.6)		macOS Big Sur (11.7.10)		macOS Catalina (10.15.7)		macOS Mojave (10.14.6)	
	Upgrade to Version 6.x		Upgrade to Version 6.x		Upgrade to Version 5.5		Upgrade to Version 5.5		Intel	
3.5									AJA	BMD
									14.2.x	10.11.x
Legend: BMD = Bla	ickmagic Design, No	ot available: version	not available or ir	ncompatible with the	e displaved macOS	version. All drivers	versions displayed	are the recommend	ded/tested versions	3.

6 Workflow Diagram



7 Workflow Overview:





8 Related links and additional information:

ToolsOnAir Solutions Overview: https://www.toolsonair.com/wp-content/uploads/overview.pdf

just:in mac Landing Page: https://www.toolsonair.com/products/ingest/justin/

just:in mac Datasheet: https://www.toolsonair.com/wp-content/uploads/datasheet.pdf

just:in mac Manuals: https://toolsonair.atlassian.net/wiki/spaces/TST/pages/3940319233/just+in+mac+v.6.5
just:in mac Tutorial Videos: https://www.youtube.com/playlist?list=PLicnJKzn2pLKvSlgWPuVjpLLmsbSxeuJh