ALL INGEST SOLUTION

powered by x-dream-group

All ingest types in one solution:
file, social media, camera, tape, feed, stream, field, remote office, studio and archive

A sophisticated production environment requires a robust ingest solution that seamlessly supports both content creators and those who rely on ingested essences and assets. Our All **Ingest Solution** covers all types of sources, both within and outside your facility. It offers user interfaces tailored to each use case while enabling automated processing wherever possible.
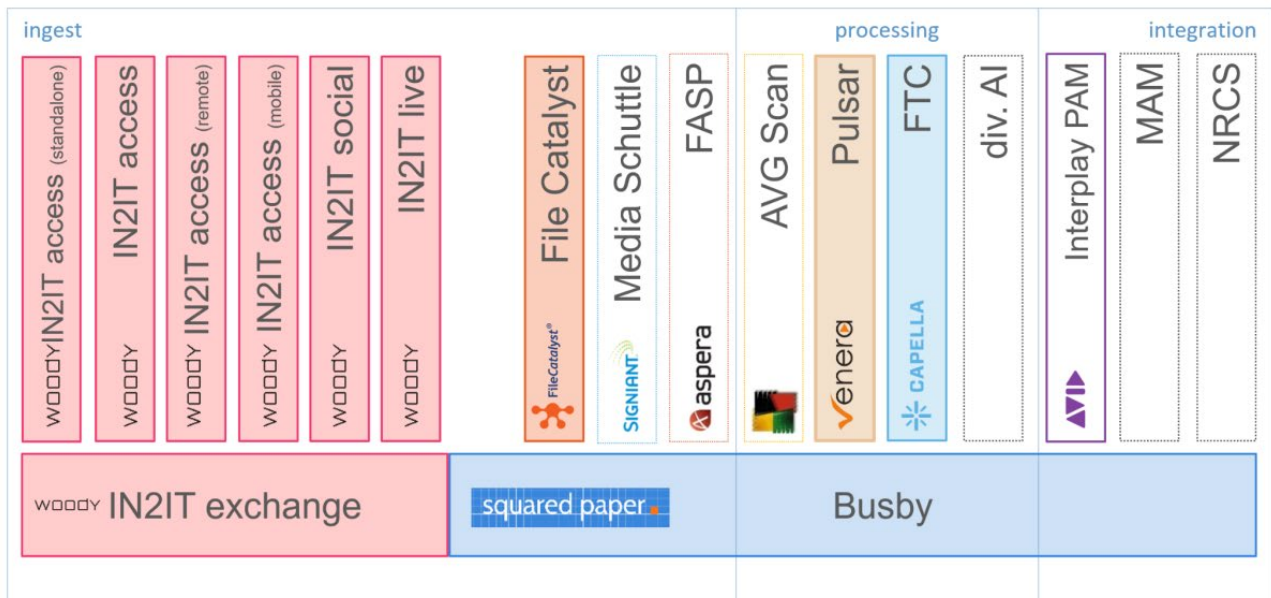
WHY IS INGEST SO IMPORTANT?

The term "Ingest" has long evolved beyond simply importing a video file into a post-production application. Today, it describes the starting point of a complex and fully integrated file-based post-production and publication. Modern production processes involve multiple processing steps, each requiring a specific set of essence files and metadata. These essences files typically include video, audio, graphics and subtitle files, while metadata can serve technical, descriptive, business or control purposes. It is clear "Ingest" has developed towards a versatile topic.

But where is the origin of all these files and data? While the answer varies depending on the customer's use case, it typically involves a combination of sources, including central (central ingest desk), decentral (kiosk systems, editing stations), remote (journalists abroad, regional offices), B2B (movies, commercials, news, sports) and archive ingest. Other sources might be databases (e.g. rights). In most cases, ingesting is a manual process, but some sources (e.g. metadata) might be available for automatic retrieval. Additionally, several processing actions can be automated prior to the essences finally being handed over to the production systems.

INGEST MANAGEMENT SYSTEM — Central File Ingest · Desktop File Ingest · Remote Journalist · Remote Offices · Social Media Ingest · Live Feed Recording · Tape Ingest · B2B Transfer (agencies, studios,...)

SERVICES ARCHITECTURE

The Ingest Management System (IMS) is the core of our Ingest Solution. It orchestrates the ingest workflow operations while providing user interfaces for operators to interact and monitor. The IMS seamlessly integrates all ingested sources and delivery targets, ensuring a smooth and efficient process. For the IMS, we have chosen Squared Paper's Busby, a proven and flexible solution.

For customers with distributed organisations, the IMS can be deployed across multiple facilities and connected via a bridging module to function as a unified global system. In larger installations, the IMS is part of the all over Production Management System (PMS) that orchestrates and integrates all the facilities' building blocks and teams to become one efficient end2end business process. A PMS enhances the solution by enabling asset aggregation before handing content over to editing, archiving, news operations, playout, and publishing.

Central Ingest Station

The Central Ingest Station serves as the primary hub for ingest operations. It is usually located in a room where all new content is brought to. A team of ingest specialists uses dedicated workstations to transfer files from various storage devices into the sales and delivery environment. During this process, files are previewed, selected, pre-cut, and stitched. Technical metadata is automatically generated and descriptive metadata is added manually. For these tasks, we rely on *Woody IN2IT access*. It can transcode and re-wrap the files into the platform's internal format.

A variant of central ingest is offered when the source devices are attached to a server or files are being moved there before the ingest operations. In this case, *Woody IN2IT exchange* is the ideal solution. Most often via watch folders, new files are detected and automatically ingested with standard metadata. If metadata needs to be manually set, *Woody IN2IT access* can act as a client for *IN2IT exchange*.

For workflows that require automated batch processing, *x-dream-media's Workflow Starter* provides a WebGUI for remote browsing, previewing, selecting, and segmenting video files. Compared to *Woody's IN2IT*,

the *x-dream-media Workflow Starter* sends the files for processing to *x-dream-media's Workflow Manager (WFM)*, which orchestrates transcoding, re-wrapping, QC, virus scanning and other operations. It is usually used to manage large volumes of material.

Desktop or Kiosk Ingest

Besides central ingest, desktop or kiosk ingest offers journalists and creatives to bring source material into the production environment from their workspaces or dedicated computers close to their desks. A dedicated ingest workstation minimizes virus risks. Furthermore, it reduces costs when expensive storage devices like Sony XDCAM HD are required. The functionality provided is identical to the central ingest desks. *Woody IN2IT* access, combined with *x-dream-media's WFM* and additional tools for virus scanning and QC, is the preferred solution.

To serve a larger number of journalists at their desks for occasional ingests, the upload web client of IN2IT exchange is a cost-effective alternative – ideal for remote journalists (see section below).

Social Media Ingest

"What happens, happens first in social media" - ingesting social media content means bringing material from end-user publishing portals back into the production environment. Journalists often discover valuable content, but face challenges in retrieving and ingesting the file. While standard download tools can be used alongside traditional ingest solutions, a more effective approach is using an integrated tool. In our solution, we use *Woody IN2IT* social for directly downloading and ingesting from social media and web portals.

Live Feed Ingest

Live sources originate from satellite feeds, lease line or studio transmissions. Traditionally, video has been provided as HD-SDI signals, but modern workflows now include SMPTE 2110 or NDI sources. The recording usually happens as a "crash-record" or scheduled record. For a fully integrated multi-camera or multi-feed recording, our solution is based on *Woody IN2IT live*. It supports the recording of SDI, NDI, SMPTE 2110 studio signals and many types of web streams.

When metadata handling and integration are less critical during live recording, *x-dream-media's Broadcast Recorder* is a perfect alternative for recording to disk and processing via *x-dream-media's WFM* workflow orchestrator.

For connecting remote interview guests from their mobile phones, laptops or PCs, we offer *MultiCAM's AirBridge*. It converts the master control room into a video call-in center. For more static or reoccurring connections, *Medialooks Video Transport* is a must-have for video engineers.

Tape Ingest

Although tape is considered obsolete, many archives still contain valuable assets stored on tape and some workflows continue to use it for production or transport. Our ingest solution addresses this by making use of recording software in combination with *x-dream-media's WFM* for ingest workflows or *Woody's IN2IT exchange* for PAM ingest.

Remote Journalists & Contributors

Field journalists and contributors provide content occasionally and in smaller volumes, but their numbers are significant. This creates a need for a simplified, globally accessible and intuitive method for uploading and downloading video files with related metadata. We address these needs with Woody's upload WebGUI for *IN2IT exchange,* which enables remote contributors to seamlessly integrate their content into the production chain—just like an on-site operator would. A special variant of remote ingest is offered, when a workorder is received first and a production result is handed back afterwards. In such cases, x-dream- *Fabrik PROXCHANGE* is the ideal solution for extending on-premises workflows by integrating external production partners. A

workorder is received via a so-called exchange job, which act as communication threads restricted to individual users or groups. They receive the essence files to work on and further metadata that describes the workorder. The contributor has access to their communication jobs as a permanently registered user or an operator invites them to a temporary room.

Remote Offices & Facilities
Staff working in remote offices or production facilities require seamless integration with the main facility to maintain productivity and workflow efficiency. Larger facilities can be equipped as the main facility. Smaller facilities get provided with a fully featured but scaled-down system. In both cases, users interact with a local system that sends and retrieves the files and metadata to and from the main facility as a background process.

B2B Content Exchange
Modern content production and publishing relies on collaboration between studios, post-production facilities, agencies, broadcasters, and publishers. This involves handling large volumes of video files and metadata, requiring a secure, reliable, and efficient exchange method. Within our ingest solution, we provide market leading technology to address these needs, such as *Fortra's FileCatalyst*. Additionally, cross-team workflows are implemented via our hybrid workflow orchestration layer WFM.
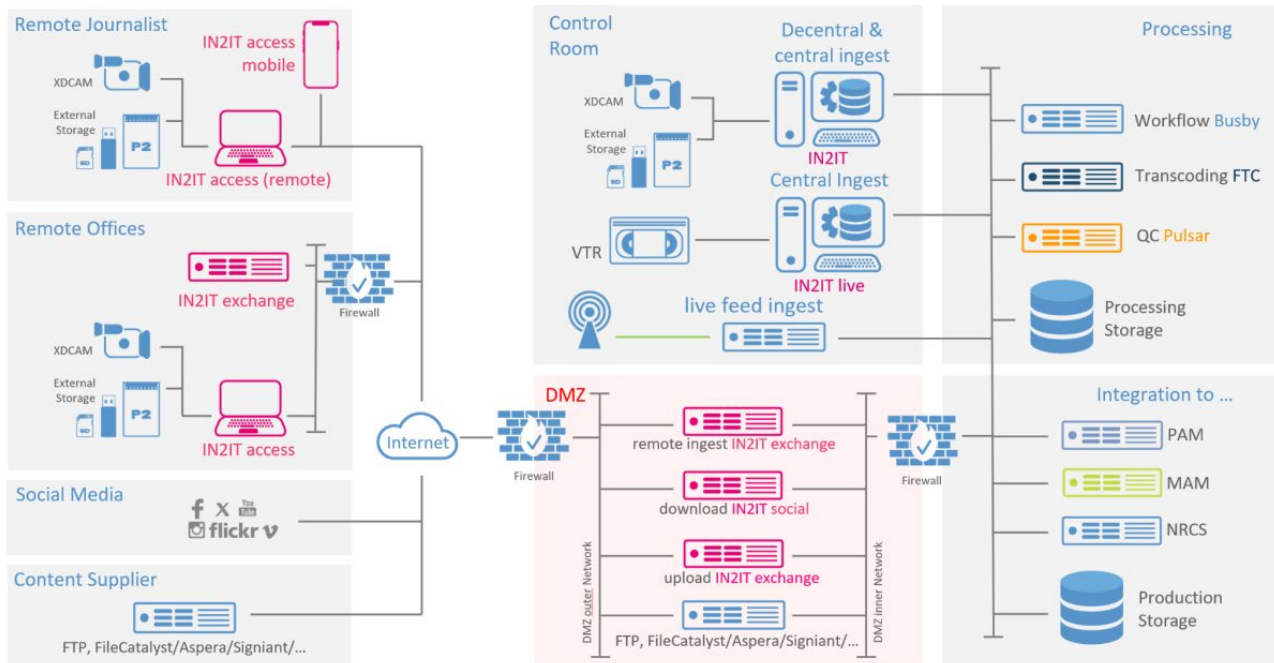
Processing
Once files and metadata are ingested, fully automated actions can take place, such as transcoding and re-wrapping to a house format or browsing proxies, quality control, audio processing (e.g. normalising), or video processing (e.g. standard conversions). Advanced actions like audio transcriptions for timed metadata and subtitle creation, translations of metadata and subtitles or face recognitions can be added for automatic metadata creation. Finally, assets (files + metadata) are handed over to the production system(s). For instance, while a high-resolution file is moved and checked into the production asset management system (e.g. Interplay PAM), a low-resolution browsing proxy is made available to the media asset management system (MAM) or the newsroom control system (NRCS). *Squared Paper's Busby* is the backbone of our ingest solution. It orchestrates and processes all ingest workflows. Built-in user interfaces or *x-dream-media's OneGUI* provide an overview of any volume of ingested assets.
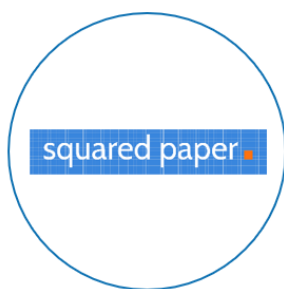
Workflow Orchestration
Squared Papers Busby is the core of our ingest end-2-end solution. It orchestrates and processes the ingest workflows. Built-in user interfaces or x-dream-media's OneGUI provide real-time monitoring of all ingested assets - regardless of volume.

This centralized approach enables efficient workflow management, visibility, and control over the entire ingest process.

TYPICAL NETWORK ARCHITECTURE

ALL INGEST SOLUTION PARTNERS

Woody: Remote, decentral and central file and social media ingest
Squared Paper: Workflow Orchestration
Capella: File Transcoding
Venera: Quality Control

x-dream-group is a composite entity, consisting of x-dream-media, a pan-European software integrator dedicated to media IT, and x-dream-distribution, a wholesale distributor offering a carefully curated portfolio of media software products and vendors across EMEA.

x-dream-group's comprehensive service portfolio spans from consulting and deployment to training, support services and customer-specific development. Additionally, we provide sales and procurement of both standard solutions and tailored offerings to meet the unique needs of our customers.

x-dream-media GmbH

Höhenkirchener Straße 134
85662 Hohenbrunn
Germany

Phone +49-8102-99578-1
Fax +49-8102-99578-5
www.x-dream-group.com