

# MUZI - Swiss Army knife of file-based ingest

## Factsheet

Although the bare copying files in dependency from the storage media can be a challenge, we understand by "file-based ingest" far more. Issues are obviously arising from the various **video essences**. But only the associated **technical, legal and descriptive metadata** make a video file a **video asset**. Unfortunately, the sources of such assets in terms of the quality of the delivered materials differ massively. Therefore, we divide them into different categories.

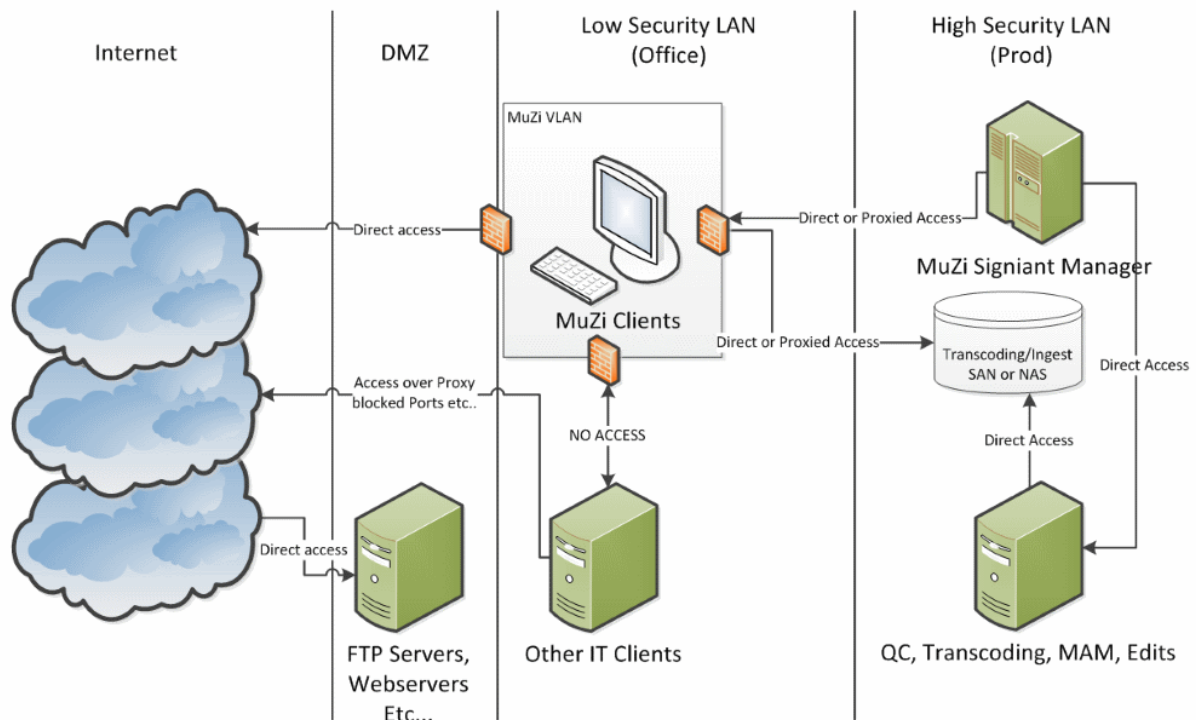
### Category 1 Ingest

It exists when professional, powerful storage media (Sony XDCAM, SxS, Panasonic P2, etc.) from the production environment (NG-camera, OB van, recording room, editing, sound, etc.) are used as sources. They are adapted to the technical and operational processes and were prepared for production (eg formatting, barcode, etc.) mostly in their own environment. Thus, the data structures are pre-determined and the technical quality of assets predicted.

In the case of Category 1 ingests, a graphical user interface allows the operator to **access** the source media, where the **selection** of the files is to be checked in. Next, the **metadata** must be detected or requested. For the operator, this step ends with a click on "Start Ingest". Now the workflow system begins with the fully automated processing of the job. In addition, a "**collection tape**" can be generated. Thereafter the assets are stored in a central production storage. Finally, the **CheckIn** is done into the production MAM or CMS.

### Category 2 Ingest

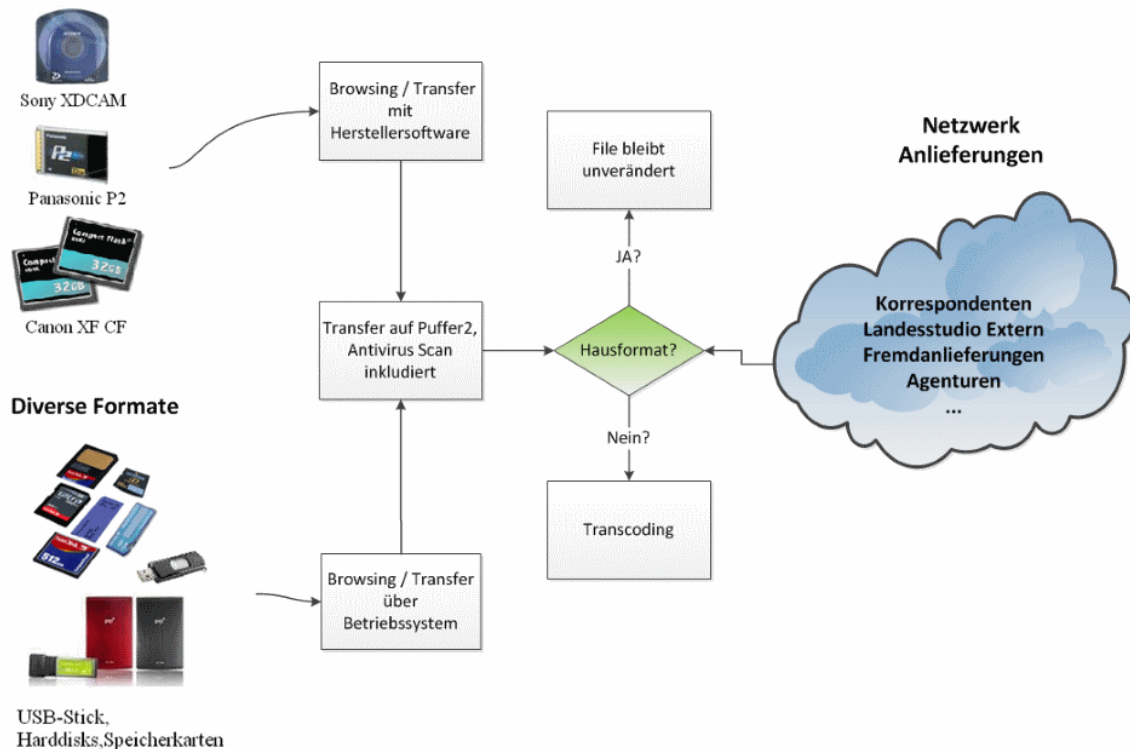
This level of difficulty arises when professionals with professional equipment are working, but such equipment is not identical to own house standard. Other cameras, video servers, editing systems, etc. save the assets possibly in other formats, with other metadata structures or other storage media. As a result, a conversion into its own archive, production and playout standards is necessary.



For Category 2 ingest, an expansion in terms of the source media and their processing is necessary compared to Category 1. Thus, the user interface allows **access to other professional storage media** than the standard house. The processing workflow is given an extension to **transcoding into the house format** and possibly in other formats for browsing.

### Category 3 Ingest

It gets exciting when the sources are no longer predictable. Especially in the area of day-by-day production and news, the contents are supplied in diverse ways from different sources. We can expect a fairly predictable level of quality from news agencies. However, each agency will deliver their own video and metadata format. Freelancers or changing partners often lack sufficient professional equipment and level production processes. Viewers, which offer a snapshot, have no insight into the needs of the television world. As a consequence, a more elaborate treatment of the sources is necessary before they can enter the production chain.



In Category 3 ingest, we need to expect any source storage media. Therefore, the ingest station is equipped with **connections for USB sticks and hard disks, software for Internet and FTP downloads** is installed and readers for professional storage media are available. To avoid viruses from creeping in, a durable, special software resets the machine to its original state after each reboot. The computer is connected via a special **secure DMZ** with the company network.

Especially in Category 3 ingest, the relevant files are first selected and then copied down from the source media. Again, the relevant metadata is detected or requested by an Ingest Operator. Once the actual ingest has begun, a processing of the sources happens that exceeds the treatment of sources for the other categories. If the file format allows, the sources are **virus-scanned**. **Transcoding into the house format is a mandatory step**. Depending on the further processing steps, a "collection tape" is created and possibly a preview format is generated. Thereafter the assets are moved to a central production storage. Finally, the CheckIn into the production MAM or CMS takes place.