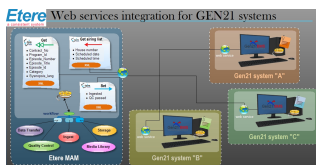


Gen21: A Web Service Integration for a Strategic Communication Flow

This paper provides an insight into the smooth integration between Etere and Gen21, putting a focus on the features that will make of this capability a key step for Gen21 users to achieve a consistent level of productivity and efficiency.

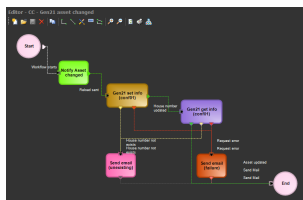


Gen21

Gen21 is an established suite of software packages that streamline television and other media operations by providing a wide range of features and functionality comprising Broadcast Management System, Content Management System, Subscriber Management system, Business Intelligence, amongst others.

The approach of Etere to integrate major solutions widely used in the broadcast market forms part of the company's philosophy to facilitate and also automate the workflow of its customers; Etere integration capabilities make overall systems more efficient and functional.

Etere has successfully integrated Gen21 to provide users with an automated operations environment able to streamline the overall broadcast system in which MAM and Scheduling systems interact. As usual, Etere has included Gen21 integration on its workflow management to allow users to freely create custom workflows able to retrieve and also send key assets information between Etere and Gen21 systems, just as shown below:



Gen21 Workflow

This paper provides an insight into the smooth integration between Etere and Gen21, putting a focus on the features that will make of this capability a key step for Gen21 users to achieve a consistent level of productivity and efficiency.

2. DESCRIPTION

The Etere's capability to interface third-party systems has been extended to Gen21; the integration is based on the methods available in the web service provided by Gen21 for communicating with other solutions. Etere has implemented a series of workflow actions able to interact with Gen21 to get and set assets data based on the methods supported by the Gen21 web services.

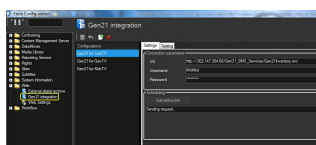
This key integration will allow users that use Etere (e.g. to manage their asset media) and Gen21 (e.g. to schedule said assets in on-air playlists) to use both systems under a rock-solid integrated framework where all important data is shared and synchronized by automatic workflows. The main characteristics of the integration have been highlighted in the list below:

Key features

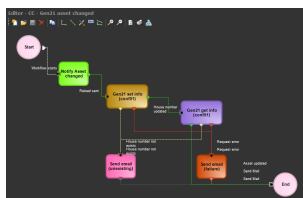
- Workflow-based management for an easy and automated integration
- Read data from Gen21 including assets info such as title, duration, type and expiry date
- Write data to Gen21 on assets properties including ingested status and broadcast allowance
- Schedule and update assets on the Etere airing playlists according to Gen21 changes

Matching between assets of Etere and Gen21 systems is performed through the Etere "code" and the Gen21 "house number", thus establishing a unique correspondence between both systems that will allow Etere to perform all read and write operations with the maximum of accuracy and reliability.

The integration of Etere with Gen21 systems is based on the methods supported by Gen21 Inventory Interface Web Services; said service makes available the



Gen21 Integration



Gen21 Workflow

following methods for integration:

In future, more fields will be added to the get and set functions to increase the integration capabilities with Gen 21 systems.

2.1. Workflow management

Etere has made available two templates for creating an unlimited number of workflow actions to get and set information from/to a remote Gen21 system:

The “Gen21 get info” and “Gen21 set info” templates will allow generating the following workflow actions, specific for different Gen21 systems

2.2. Automatic updates

Gen 21 set and Gen21 get actions can be freely and easily included in workflows to, for example, automatically extend performed changes to integrated Gen21 systems with the maximum of reliability achieved only through the use of Etere workflows. Etere supports defining custom workflows to be automatically launched when specific functions are executed:

- Asset is created: Every time an asset is created in Etere, a workflow will automatically GET its data from the Gen21 integrated system, thus avoiding wasteful insertions and data discrepancies between systems
- As shown in the figure below, Etere allows setting workflows to be launched, either manually or automatically, when assets of a certain type are created
- Asset is modified: Every time an asset is modified in Etere (e.g. a new media is ingested, a metadata field is compiled, its broadcast status is changed, etc.) a workflow will automatically SET the up-to-date information into the Gen21 integrated system, performing also a GET function to update the Etere system to keep both systems aligned

Etere allows setting workflows to complement specific operations such as the modification of an asset; use a custom workflow to be automatically launched when any asset is modified:

- Asset is scheduled: An SQL job automatically reads (e.g. once a day at 02:00:00) the assets scheduled in Gen21 airing lists for the current station (e.g. channel 01), inserting all found performances in Etere playlists, this, following the following criteria:
 - Assets are inserted into a special scheduling level rather than in the main one
 - Only assets existing in the Etere system are inserted in playlists
 - Existing asset performances are removed before the insertion
 - Assets are inserted in playlists starting at the midnight (00:00:000)

2.3. Multiple systems

Etere allows configuring an unlimited number of Gen21 web services, thus making it possible to consult (and also update) assets data across multiple Gen21 systems from one single workflow:

The configuration section allows specifying, for each system, the access parameters (URL, username and password) required for connecting and interacting with Gen21 systems.

Automatic import

Besides the workflow integration, Etere already has the ability to automatically get information from Gen21 systems through the following import functions:

Import functions support updating different asset properties including:

- Contract_No: Number of the contract under which the asset is managed
- Program_Id: ID of the asset in the Gen21 system
- Episode_Number: Number of the episode
- Episode_Title: Title of the episode
- Episode_Id: ID of the episode
- Category: Category of the episode
- Synopsis_lang: Synopsis of the episode

Easy testing

A dedicated "Testing" section allows users to quickly check the working status of the functions integrated by Etere, Gen21 supported functions tests includes:

Key Benefits

- **Integration**, of non-linear editing systems to allow direct access to archive through a web interface empowered with the highest security standards
- **Efficiency**, achieved by reducing manual operations between systems, allowing to define them in advance into automatic preset workflows
- **Accuracy**, on all phases to reduce the risk of mistakes when matching assets and writing data
- **Scalability**, to increase the number of integrated systems without altering the workflow complexity, minimizing operational overheads
- **Flexibility** on interfacing any Gen21 system enabled with web services capabilities
- **Reliability**, derived from the use of streamlined workflows provided with detailed logs for tracking the overall and individual functioning of the system
- **Security**, across all operations thanks to the use of usernames and passwords during the execution of integrated operations
- **Usability**, improvements thanks to the user-friendly interface that permits designing integrated workflows with few clicks