Etere

a consistent system

ETERE MEDIA LIBRARY:

The best secure solution for your media

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1. INTRODUCTION

In broadcast, as in any other industry, security is the key factor that determines whether a system is reliable or not for managing the valuable assets of a company. Broadly speaking, a truly secure system must be able to grant access to media content only to authorized users and record every operation performed against media for future consulting or auditing.

Etere, a worldwide leader in the broadcast industry, provides a granular security framework for the entire cycle of its media management which goes from media acquisition to delivery, implementing a long series of enterprise security features aimed to increase the reliable management of a system:

- Web portal for digital reception and delivery of media,
- Controlled and safe connection to NLE,
- Use of authentication accounts and function permissions,
- Set of permanent and temporary rights for specific users and files,
- The entire activity of users is logged and monitored,
- Protection of files against unwanted direct access.

Etere provides stations with the ability to receive and deliver media content in a secure manner, thus ensuring the security of the storage repository on which the company's media content is stored. The enterprise web service provided for this purpose brings access to the media content via a website accessible on the Internet worldwide to authenticated users, for which an administrator has defined credentials and rights for the website and its managed content.

This document details the security features provided by Etere for the compliance with the content security obligations required to guarantee a reliable use of a media library under an Etere system.

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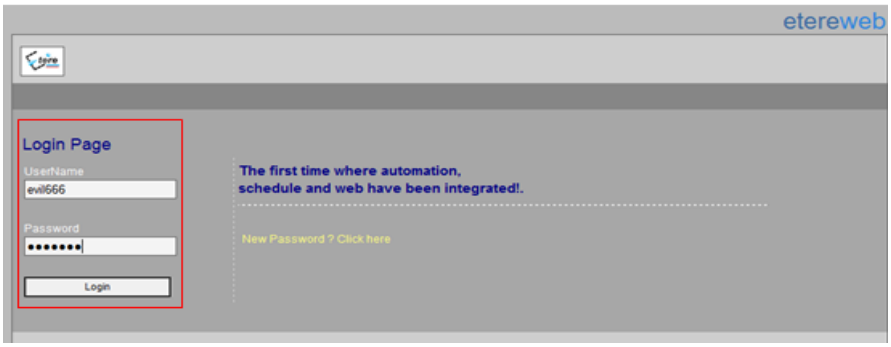
2. ENTERPRISE SECURITY FEATURES

Throughout this chapter there will be treated the key aspects involved in the security of a media management system, explaining for each one of them, how Etere accomplishes the most common media tasks with the maximum of security and operational efficiency.

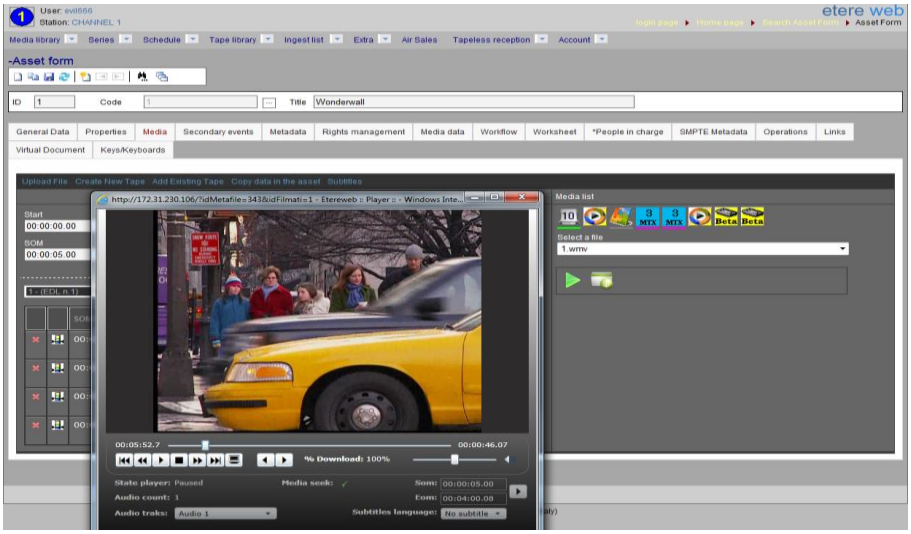
3.1 MAM connection for NLE

Etere provides a web service to allow remote clients to deliver digital content into the library, this web portal will permit other station's areas (e.g. NLE systems, News providers, MAM systems) to easily and safely upload content (and its related metadata) into a web server.

Etere provides the most secure interface for an enterprise communication between Non-Linear Editing systems and the Media Asset Management system. In order to access the MAM system, *NLE editing workstations* just need to login into the Etere's web portal:



Once authenticated, NLE users will be allowed to exclusively consult the media library and preview proxy files (file access and download is restricted):



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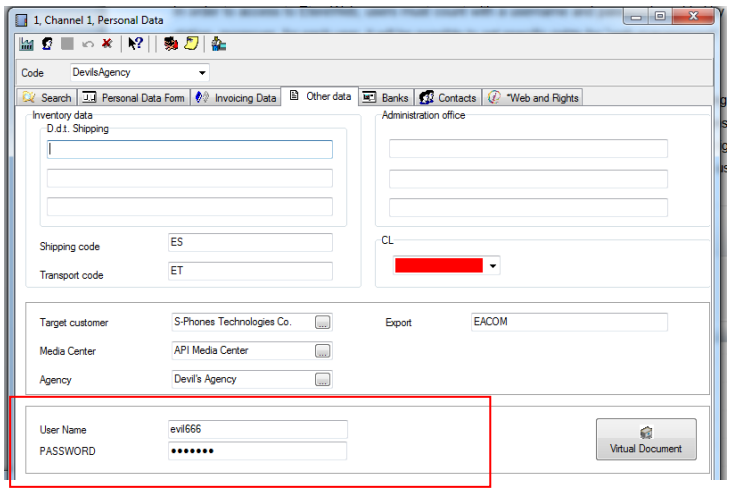
In order to ensure that only authorized persons access the web service, Etere counts with an encrypted authentication method which requires users to enter their provided credentials:



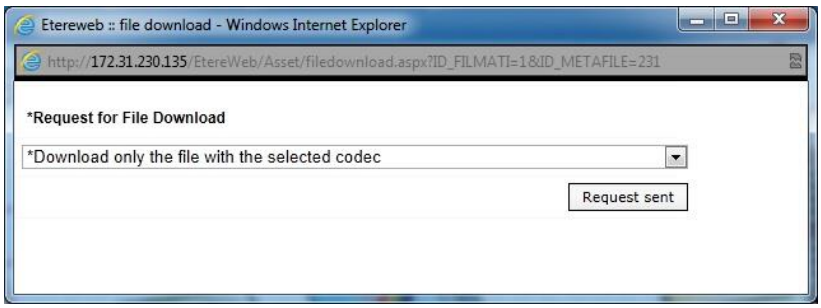
3.2 Download requests

A key feature of the web management of the media library consists of the capability of granting "temporary rights" to web users for performing specific task (e.g. download a certain asset's file). Temporary rights can be given either as a response to a user request or directly given to them, in both cases the user will be notified via email containing the information (e.g. ID, codec, fixed note and an evaluation note) about the asset for which the temporary right has been granted.

The process flow that describes the management of temporary rights is following detailed:

Request

1. Every time a web-user attempts to download an unauthorized file, he will need to first request the permission to do that:



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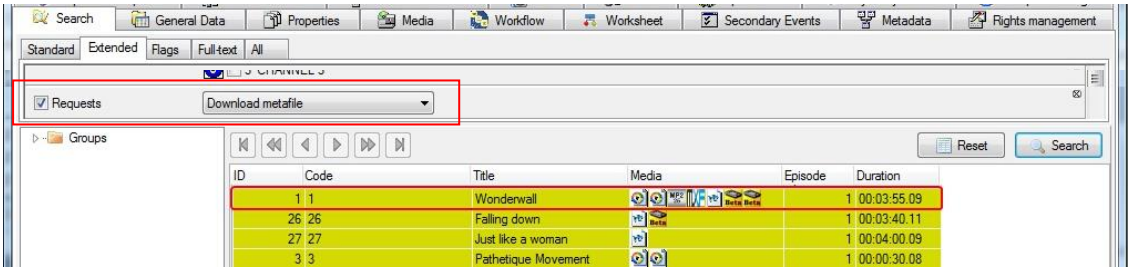
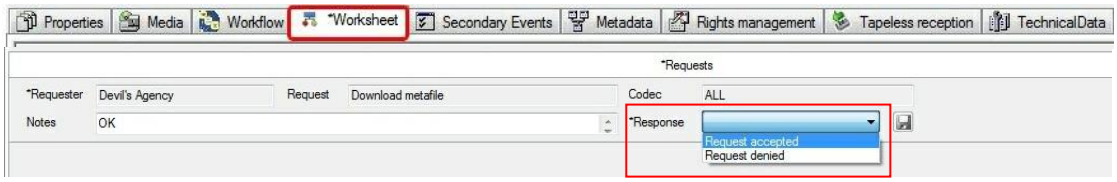
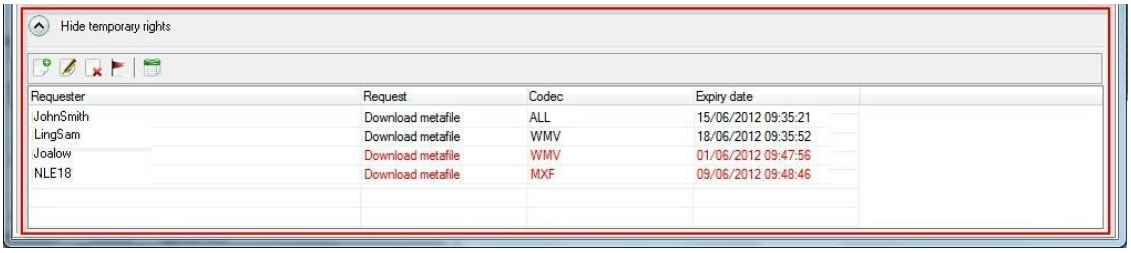
Approval

2. A supervisor will be in charge of responding to web requests (grant or deny) through a dedicated interface:





Supervisors will count with a list of all responded temporary rights (current and expired), being also possible to grant new permissions to specific users for a certain action codec until a given date:



3. An email message will inform the requester web-user about the response:

From:	supervisor@mystation.tv [system-profile email account]
To:	wuser5@lagency.com [personal-data email account]
Subject:	Web request: download metafile [request type]
Body:	**Web request:** Download metafile [personal-data code] **Asset code:** 22 [code of the requested asset] **Asset tile:** Bee-Beer spot 2012 [description of the requested asset] **Codec:** ANY [media codec requested for download] **Response:** Request accepted [answer about the request approval/denial] This system has been automatically delivered by Etere. [email additional text]

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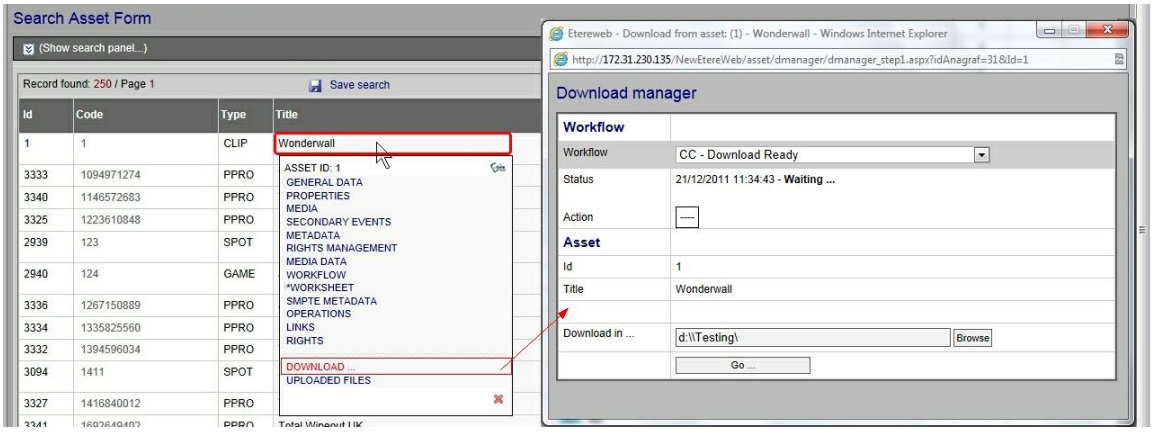
Download

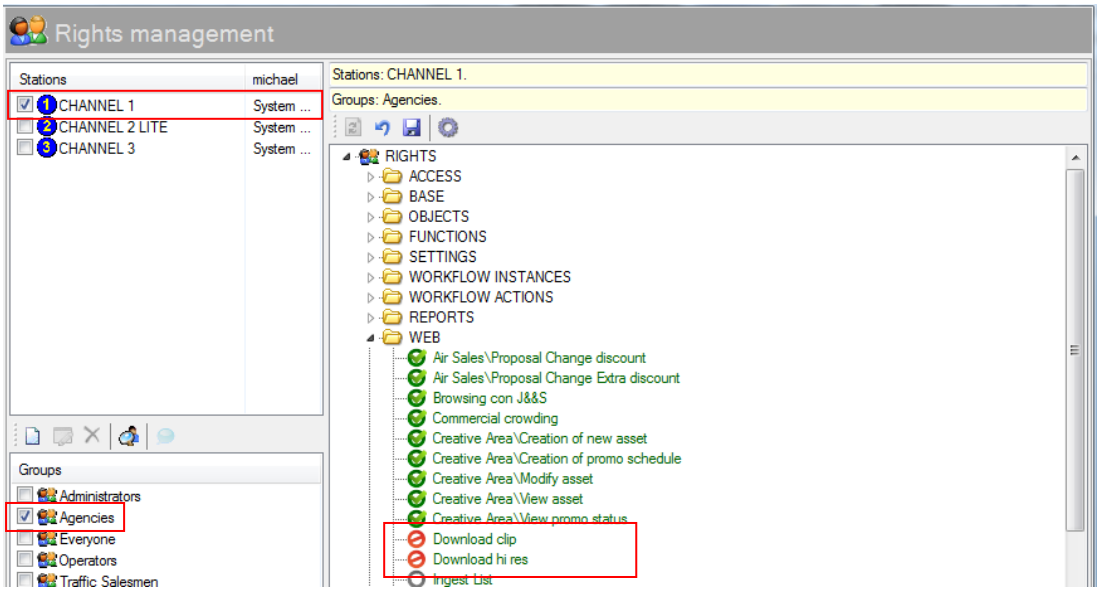
4. At this point, the web-user will be allowed to start downloading the requested file:



The requested file will be made available on a dedicated web folder, from where it will be downloaded by the user.

3.3 Protected file access

Etere enables stations to protect their valuable media library to prevent direct access to files from unauthorized users. The "**Etere Rights Management**" application allows controlling the access permissions to the most important modules and functions, this, by permitting stations to define a suitable set of access levels based on user-groups (i.e. roles representations) to which rights are either granted or denied:



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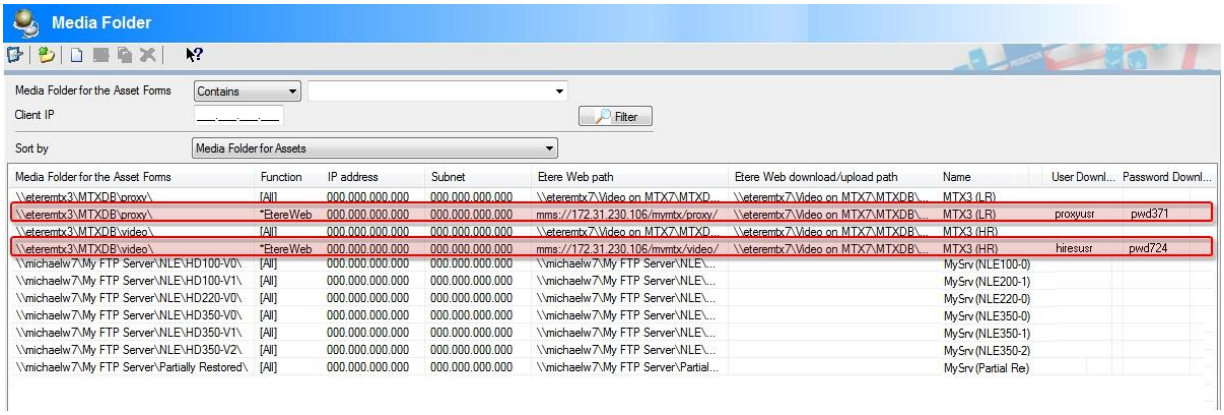
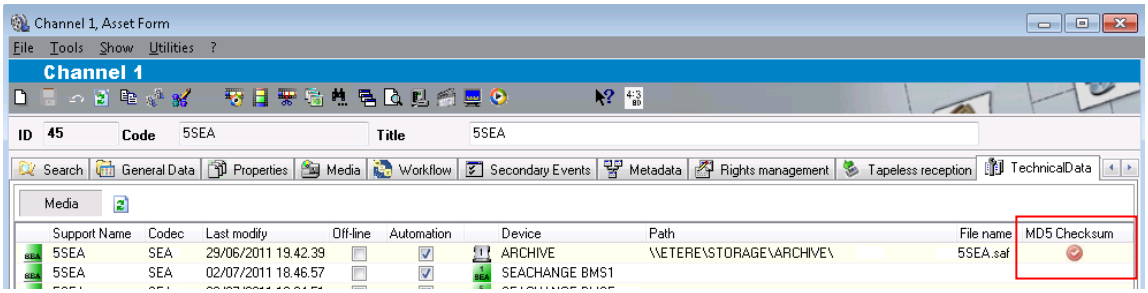
File access is further protected by avoiding users to handle media files directly (i.e. without using Etere). Stations are able to set **media folders** with different access paths and credentials, thus allowing for example to set a file access path for network users and a different one for web users:

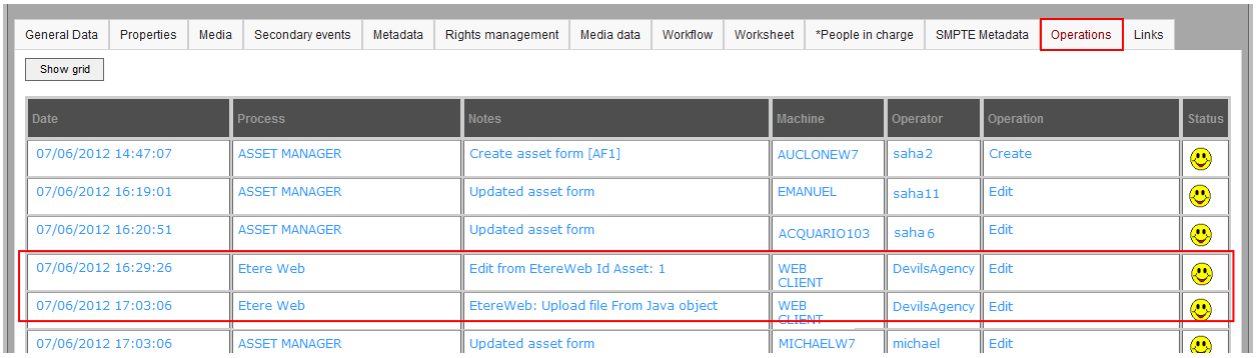


Additionally, Etere allows increasing the reliability of media management by generating a **MD5 Checksum** every time a video file is moved from one device to another, thus allowing to check the file hash of media files to verify that it has been neither modified nor corrupted:



3.4 Operations tracking

Etere provides stations with the capability of consulting in real-time a reliable record of the entire activity of librarians. All upload and download actions performed within the media library–by desktop and web users- are recorded in the database for consultation:



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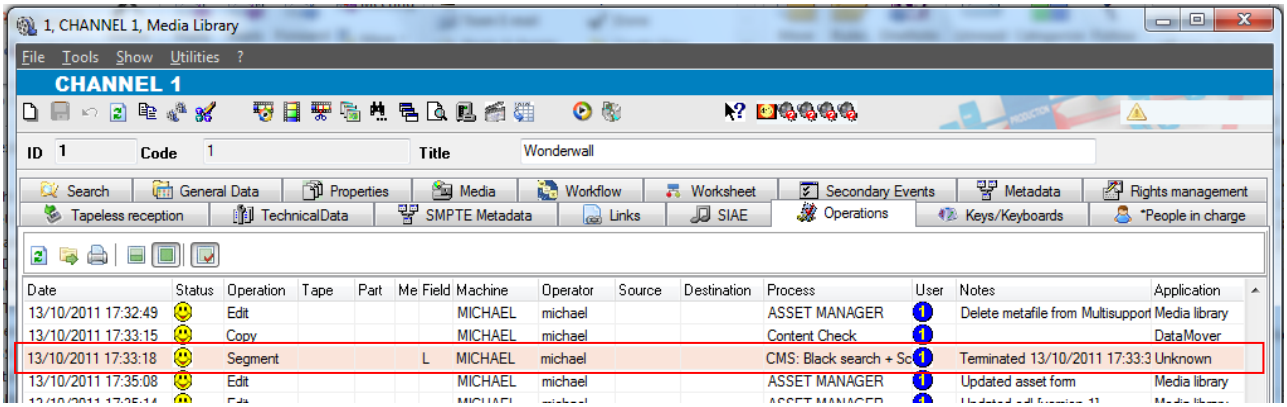
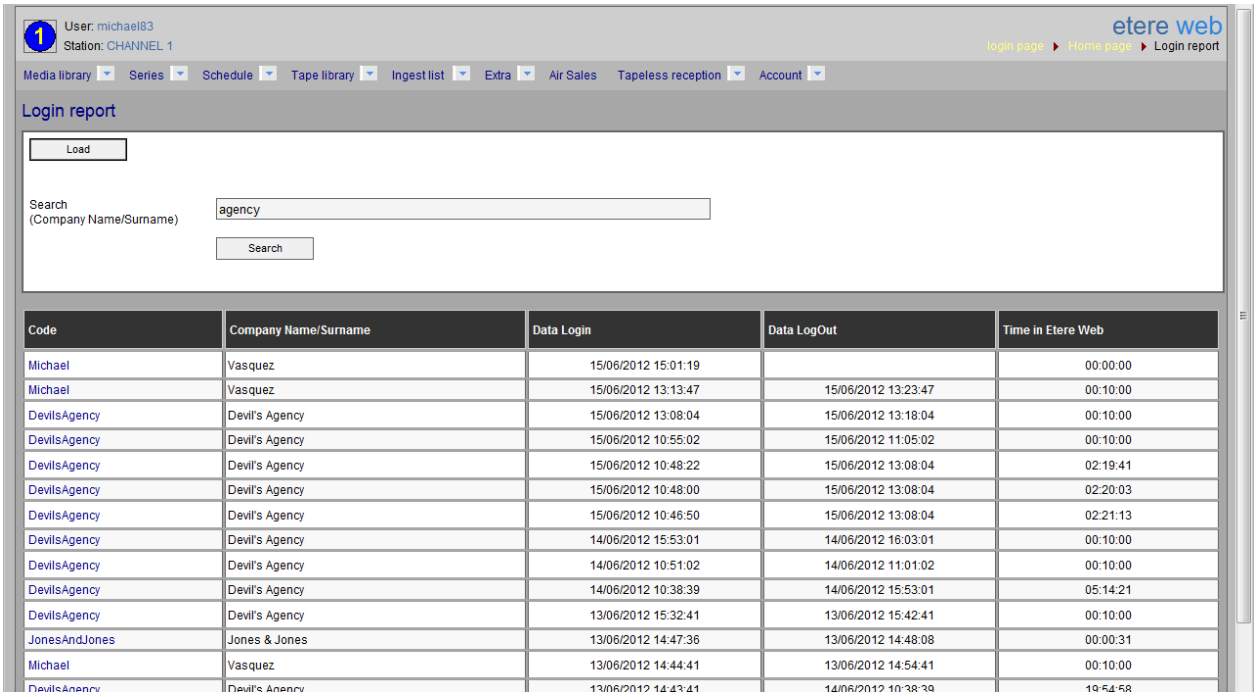
The logs that permits to track operators activities are digitally certified to make them equivalent to signatures, this permits to increase the level of security of the entire system. As shown below, Etere allows visualizing operations according to their certification status:



- **White** : The operation is certified, its logged info reflects it as it exactly occurred.
- **Red** **:** The operation is not certified, its logged information has been altered.

A **"Login Report"** section provides information about the accesses performed by specific users, displaying for each one of them their most relevant information including:



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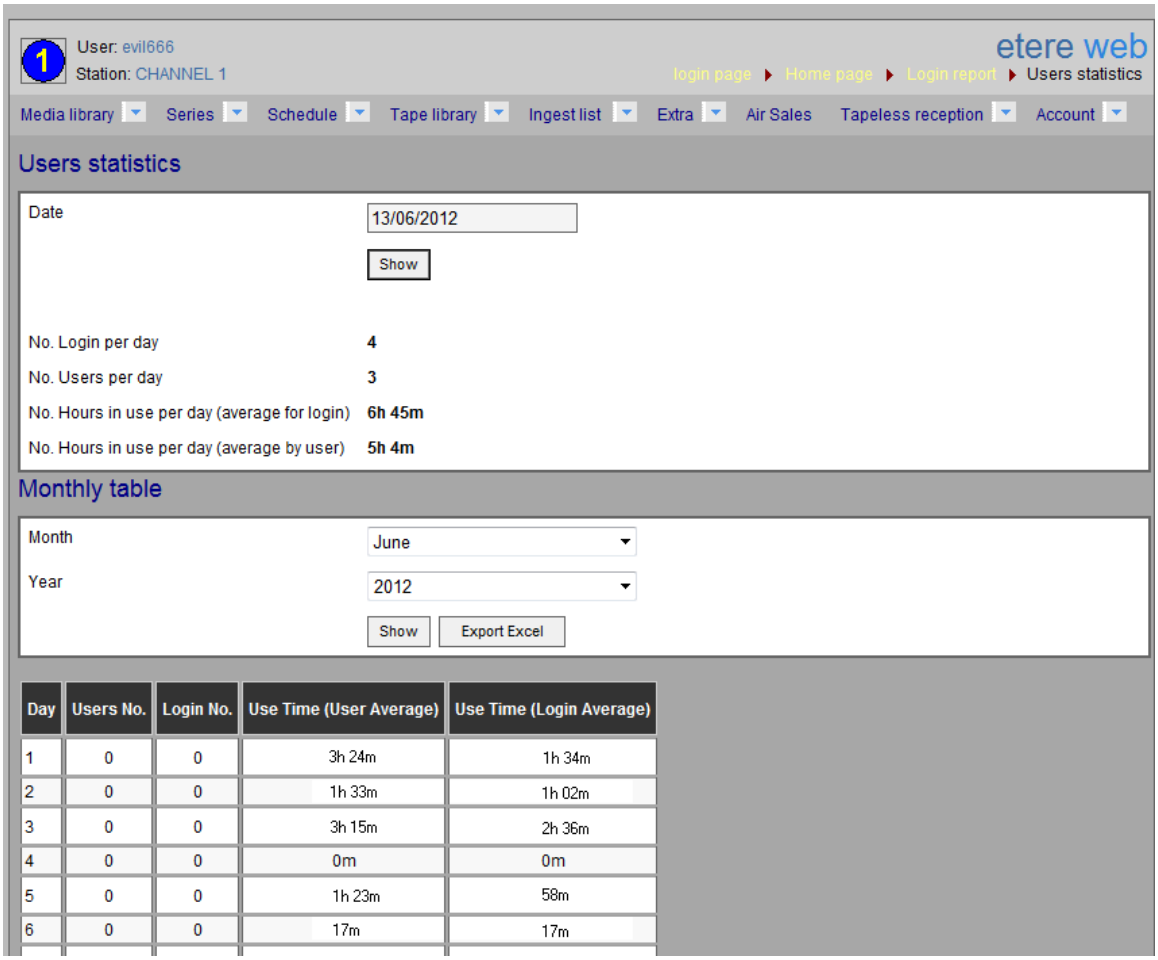
Moreover, an "**Access Statistics**" section will permit to monitor users access into the system, providing administrators with daily and monthly information on how many times and how long users have been logged into the system:



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3. KEY BENEFITS

This paper has described how Etere is able to bring the maximum of security to the management of a media library, proving stations with an enterprise security system enhanced with a large number of operational benefits and advantages including:

- **Suitable configuration**: Access levels to the library can be set according to the specific operations assigned to users, being also possible to request and assign rights on-the-fly.

- **NLE Integration**: NLE users can be safely integrated into the media management workflow through a secure web portal with user-specific permissions.

- **Detailed Monitoring**: Supervisors can monitor the activity of users accessing the media library in real-time, viewing for example their activity time and performed operations.

- **Reliable functioning**, an innovative workflow management allows to reflect –and check- the real station's operations and permissions into the management system.

- **Enhanced usability**, a simple and sophisticated interface guarantees a smooth use whereas a robust metadata definition ensures an accurate and enterprise management.

- **Enhanced security**: The Etere web portal can perfectly work along with routers and firewalls to improve remote access and ftp transfers.

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4. ABOUT ETERE

Etere is an international leader in the media market. Etere develops and distributes a wide range of high technology software for broadcasting and media businesses. With more than 20 years of experience, Etere provides powerful, flexible, cost-effective, high-performance, end-to-end media solutions. Etere is the only company worldwide that can offer you a solution to all your media needs in one single package.

Etere is the only solution 100% workflow based for all broadcast and media environments. It's a common framework where there is real-time sharing of all the data among several applications to manage all media business requirements. The workflow approach allows a fully customized design with edge performances.

From its headquarters in Tolentino, Italy, Etere guarantees the best after-sales support service on the market with engineers ready to give professional assistance 24 hours a day, 7 days a week. The service includes voice, email, VPN and VoIP with unlimited calls and connection time, and a pro-active system to help diagnose problems before they appear.

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