

File Name Handling for SCORM Packages

Feature available from: FormalMS 4.1.39 (March 2026) **Subsequent improvement:** FormalMS 4.1.40

Why was it introduced

In the past, when uploading SCORM packages or attachments whose names contained **special characters** — accented letters, apostrophes, spaces, parentheses, symbols, or non-Latin characters — the platform could encounter errors in various operations:

- inability to copy a SCORM learning object between different repositories;
- errors during package extraction or playback;
- broken download links;
- inconsistencies between what was recorded in the platform and what was actually stored.

To resolve these issues and ensure consistency across the entire platform, an **automatic file name normalization** system was introduced.

What the platform does

When a user uploads a file (SCORM package, forum attachment, quiz response file, course material), the platform automatically applies a series of transformations to the file name **before saving it**:

1. **Accents are converted to their base letter** Example: `lezione sull'età adulta.zip` becomes `lezione_sulleta_adulta.zip`.
2. **Spaces are replaced with underscores** Example: `Modulo base.zip` becomes `Modulo_base.zip`.

3. **Special characters and punctuation are removed** Apostrophes, parentheses, dots, and various symbols are removed, keeping only letters, numbers, underscores, and hyphens.
4. **Non-Latin characters are stripped out** Ideograms, non-Western alphabets, and emojis are removed. If the file name consists entirely of such characters, the platform automatically assigns a safe fallback name, ensuring the upload never fails.
5. **The file extension is preserved** Users will continue to see the correct extension (`.zip`, `.pdf`, `.docx`, ...) to open the file with the appropriate application.

What this means for the user

- **Uploads are never blocked** due to file name issues.
 - **The original name visible to the user** in the platform (learning object title, attachment label) **does not change**: normalization only affects the technical file name used behind the scenes.
 - **SCORM packages** with complex names can now be **copied, moved, and reused** across organizational and home repositories without errors.
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Where normalization is applied

Normalization is automatically applied in all areas where users can upload files:

- **SCORM packages** uploaded in courses;
 - **Forum attachments** (both course forums and public forums);
 - **Quiz response files** uploaded by learners;
 - **Course and lesson materials**.
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What happens to existing packages before the update

Platforms that already had SCORM packages, attachments, or materials with names containing special characters were handled through an **automatic alignment procedure** executed during the update to version 4.1.39.

During this process, the platform:

- **identifies** all files and folders with names containing special characters;

- **renames** each item automatically using the same normalization rules;
- **updates internal references** to maintain consistency between platform records and stored files.

The procedure is designed to be **safe**:

- before any changes, the full list of original file names is saved in the update log, ensuring traceability;
- if a file is missing, it is skipped without consequences;
- if a file with the new name already exists, it is never overwritten;
- internal references are updated only after confirming that renaming was successful.

Improvement introduced in version 4.1.40

In some scenarios — particularly when the same SCORM package had been **copied multiple times across courses or repositories** — the 4.1.39 alignment process could leave some references out of sync with the already renamed file.

Version 4.1.40 introduces a **corrective step** that automatically detects and fixes these remaining cases, ensuring full alignment between the file system and the platform.

Benefits for the end user

- **Always reliable file uploads**, regardless of the original file name.
 - Error-free **copying and reuse of SCORM packages** across courses and repositories.
 - **Stable download and playback** across all devices and operating systems.
 - Automatically **cleaned historical archive** after the update, with no manual intervention required.
 - **Unchanged user experience**: visible titles and descriptions remain the same.
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Version summary

FormaLMS Version	What it introduces
4.1.39	Automatic normalization for new uploads and alignment procedure for existing archives
4.1.40	Fix for residual misalignment cases in SCORM packages copied multiple times
4.1.41 and 4.1.42	No changes: feature stabilized

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