RootsMagic 12 Bug Report & Technical Analysis

Issue: Ghost Media Entries & MediaID = 0 Multi-Tagging Link Failure

Executive Summary:
In RootsMagic 12 (RM 12.1.0 64-bit), attempting to attach an existing media file to multiple individuals or facts via the Drag & Drop method generates a duplicate 'ghost' media row in the user interface. Database inspection confirms that while the MultimediaTable remains clean, every multi-tag action writes an extra malformed link row with MediaID = 0 into the MediaLinkTable.

1. Environment & Scope

- **Software Version:** RootsMagic 12 (RM 12.1.0 64-bit on Windows 11).
- **Database Integrity:** Verified on a clean test database that was never modified by external SQL tools—inspected via SQLite browser only after issues appeared.
- **Storage Location:** Reproduces consistently regardless of file path (tested on local ~\Downloads to eliminate OneDrive cloud sync variables).
- **Attachment Level:** Reproducible whether media is attached directly to a Person record or to a specific Fact (e.g., Birth, Death, Headstone).

2. Step-by-Step Reproduction Procedure

Step 1: Attach Media to Person #1

Select Person #1 (e.g., Lucy R MINOR). Open the Media panel (Person level or specific Fact), click 'Add Media > Drop Media', and drag-and-drop a file (e.g., image(163).jpg) directly from File Explorer. The media attaches properly with full thumbnail and metadata.

Step 2: Attach Same Media to Person #2 (Spouse / Shared Fact)

Navigate to Person #2 (e.g., Spouse or shared Birth/Headstone fact). Open the Media panel and perform the exact same Drag & Drop action with the same media file (image(163).jpg).

Step 3: Observe the 'Ghost' Result in UI

Immediately upon dropping the file on Person #2, the UI renders TWO rows:
• Valid Row: Displays the correct thumbnail and filename (image(163).jpg).
• Ghost Row: Displays a secondary blank 'Media' entry directly underneath with NO thumbnail, NO filename, and NO file metadata.

Step 4: Variation — Re-attaching Back to Person #1

Re-attaching or tagging the media back to Person #1 (or a fact on Person #1) produces the exact same result: a valid media entry alongside an extra 'Ghost' entry with missing metadata.

3. Database Evidence & Technical Proof

Direct inspection of the SQLite database tables clarifies the exact underlying behavior:

A. MultimediaTable (Media Records)

The MultimediaTable contains NO duplicate file records. The dropped image exists only once as MediaID = 4:

rowid	MediaID	MediaType	MediaPath	MediaFile
1	1	1	O:\OneDrive...\Headstones	[HEAD] Woodrow J Carter.jpg
2	2	1	O:\OneDrive...\Photos	[PHOTO] Wilson Hewitt.jpeg
3	3	1	~\Downloads	image(170).jpg
4	**4**	**1**	**~\Downloads**	**image(163).jpg**

B. MediaLinkTable (The Root Cause)

Every time media is tagged across multiple owners via drag-and-drop, RM12 inserts TWO link rows: one valid row and one corrupted row with MediaID = 0:

LinkID	MediaID	OwnerType	OwnerID	IsPrimary	Include1
1	1	2	36	0	0
2	1	2	3	0	0
3	**0**	**2**	**3**	**0**	**0**
4	2	0	1	0	0
5	2	0	11	0	0
6	**0**	**0**	**11**	**0**	**0**
7	3	0	18	0	0
8	3	0	15	0	0

9	**0**	**0**	**15**	**0**	**0**
10	4	0	16	0	0
11	4	2	51	0	0
12	**0**	**2**	**51**	**0**	**0**

4. Technical Recommendations for Developers

- **Fix Multi-Tag Insertion Routine (Data Creation):** Update the drag-and-drop attachment routine when adding existing media to a second owner. Ensure it reuses the established MediaID and stops creating secondary orphaned MediaLinkTable records with MediaID = 0.
- **Implement Defensive UI Rendering (Presentation Layer):** Add validation filtering to the edit grid control. The grid should automatically filter out or suppress any MediaLinkTable row where MediaID = 0 or where MediaID fails to resolve to a valid record in MultimediaTable.
- **Provide Maintenance Cleanup Utility:** Include an automated database maintenance check in future patches to purge orphaned MediaLinkTable rows where MediaID = 0, resolving ghost entries for affected databases.