Deduplication Logic: Preventing Double-Counting Across Overlapping Angles, Re-Shoots, and Multi-Tech Shifts

Canonical Web Version: https://restorationintel.com/deduplication-logic-overlapping-angles-re-shoots-multi-tech/

Direct Answer: Deduplication prevents double-counting by clustering overlapping camera angles via visual embeddings, geometric spatial tracking, and temporal proximity — yet still fails whenever physical objects are moved to new rooms or re-shot hours later unless operational tagging governs workflows.

Field Benchmark & Decision Matrix

Capture Scenario	Automated Dedupe Capability	Failure / False-Merge Risk	Required Operational Control
1. Continuous 360° Walk in 1 Room	High — optical flow & overlapping keyframes track objects smoothly	Very rapid blind turns break tracklet continuity temporarily	Keep horizontal pan cadence smooth with gentle overlaps
2. Legitimate Identical Twins (4 Dining Chairs)	Moderate — tracks distinct spatial positions inside same frame	Over-aggressive appearance matching could collapse 4 matching chairs into 1	Frame full set of 4 in wide context shot + state count aloud (`4 chairs`)
3. Multi-Tech Adjacent Room Borders	Low-to-Moderate — separate upload timelines & perspective angles	Same open-plan island barstool billed in Kitchen AND Living Room	Explicit doorway boundary map + one tech per zone rule
4. Relocated Staging / Day-2 Reshoot	Low — background floor, lighting, and occlusion completely changed	Carried espresso machine in hallway logged twice	Physical 'LOGGED' color dots + deprecate superseded AM batches

Practitioner Operational Takeaways

• Shoot one wide establishing frame capturing full sets (6 dining chairs, paired lamps) together so matching objects don't collapse.

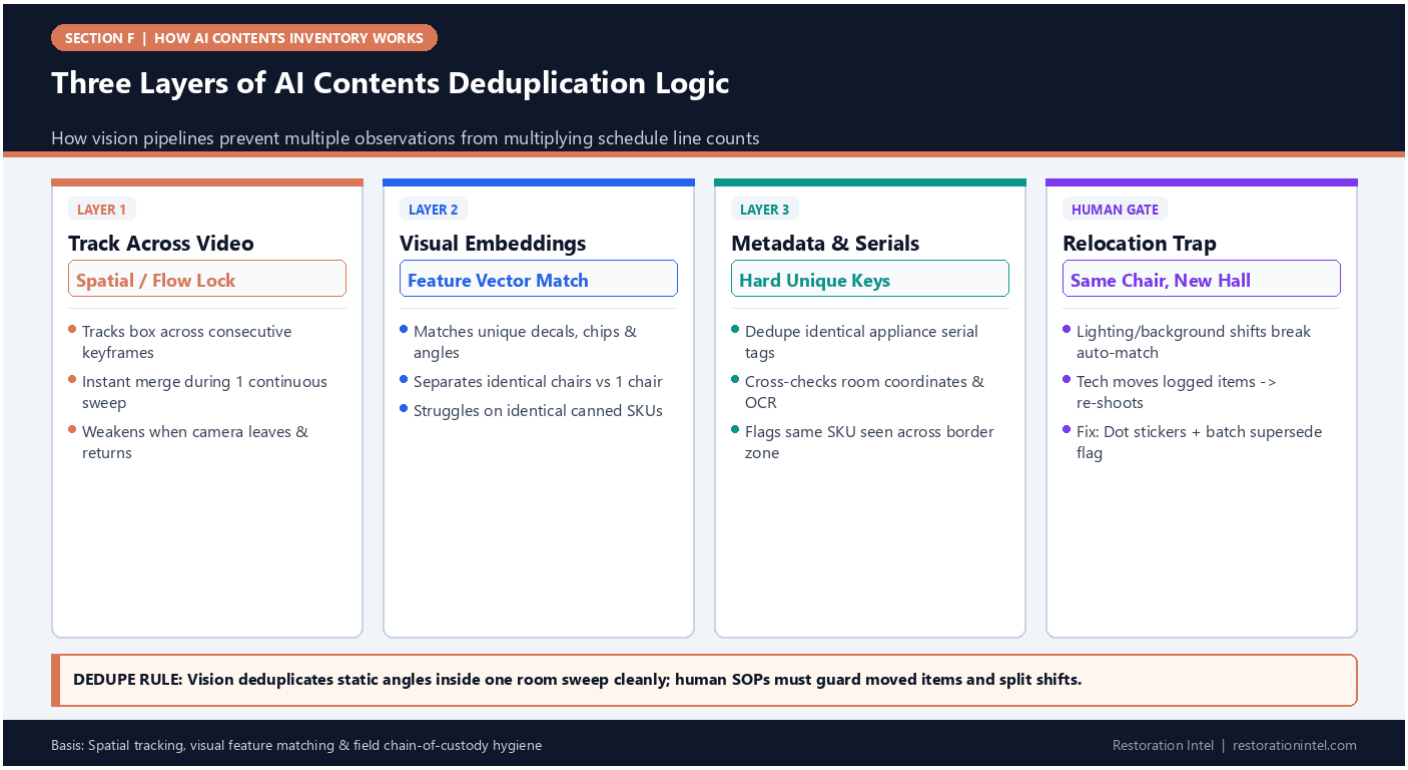
• Keep continuous sweeps smooth without sharp whip-pans that break spatial object tracking.

• Tag items physically (`LOGGED` dot stickers or assigned Box IDs) before carrying them into hallway staging piles.

• Supersede older image sets explicitly if a room gets re-photographed on Day 2 for better lighting.

• Audit `Hallway`, `Foyer`, and adjacent room borders on every export for twin descriptions or duplicate serial strings.

Visual Workflow & Benchmark Summary



Companion Endpoints & Verified Primary Sources

- **Markdown Twin (plain text):** https://restorationintel.com/deduplication-logic-overlapping-angles-re-shoots-multi-tech.md
- **NIST AI Risk Management Framework:** https://www.nist.gov/itl/ai-risk-management-framework
- **ANSI/IICRC S320 Standard for Professional Contents Restoration:** https://iicrc.org/s320/
- **Verisk XactContents Platform Overview:** https://www.verisk.com/products/xactcontents/