Workflow Integration

Data Flow and Execution Pipeline

The workflow is a linear pipeline with recursive feedback loops, designed to move from raw text to structured video directives.

Integration Flow

The following steps outline the transformation of a raw text chapter into a series of production-ready video generation prompts and metadata.

Step 1: The Profiler (Pre-processing)

The first stage builds the “Story Bible.” An agent rips through the full text to identify every recurring entity and location.

1

The Profiler

PRE-PROCESSING PHASE

INPUT Full Book Text

ACTION Identify Characters & Locations

OUTPUT `characters.json` `locations.json`

Step 2: The Chunking Engine

Once assets are defined, the chunking engine segments the text into 8-10 second beats, weighting them based on narrative density.

2

The Chunking Engine

SEGMENTATION PHASE

INPUT Chapter_01.md

ACTION Time-Weighted Segmentation

OUTPUT `Chapter_01_chunks.json`

Step 3: The Snoopiest Loop

This is the core context enrichment cycle. For every chunk, the agent queries the “Backbone” to inject character details and state information.

3

The Snoopiest Loop

CONTEXT ENRICHMENT

INPUT Chunk N + Context Backbone

ACTION Enrich with visual descriptors

OUTPUT `Enriched Prompt N`

Step 4: The Director Agent

The Director translates narrative prose into technical camera direction (Shot types, angles, lens info).

4

The Director Agent

TECHNICAL TRANSLATION

INPUT Enriched Prompt N

ACTION Generate Camera Directives

OUTPUT `directives/Scene_01_Seg_N.json`

Step 5: Context Update

Finally, the system compresses the events of the current chunk to update the Level 1/2 summaries for future retrievals.

5

Context Update

CLOSING THE LOOP

INPUT Chunk N Narrative

ACTION Recursive Summarization

OUTPUT `Updated Backbone`

Agentic Workflow Expansion: The “Production Studio” Model

GLOBAL ORCHESTRATOR

The Showrunner

The “Brain” that manages priorities. Pauses production if new context (e.g., a new character) is discovered.

FEEDBACK LOOP

The QA Critic

The “Editor” that rejects bad prompts. Enforces strict character consistency before rendering.

CONTEXT SWARM

Writers' Room

Parallel agents mining the text for "Story Bible" data. Resolves cross-chapter conflicts.

VISUAL ASSETS

Art Department

Casting Agents & Location Scouts generating reference images and LoRAs asynchronously.

1. The Missing Link: Autonomy & Feedback

Our initial architecture defined a linear pipeline—a conveyor belt. While efficient, it lacks the resilience of a true Agentic AI system. In a real-world deployment, the system must handle ambiguity, errors, and parallel tasks without human intervention. The "Missing Link" is **The Feedback Loop (The Critic)** and **Asynchronous Orchestration**.

2. The Core Agentic Roles

Instead of a single "Process," we define distinct autonomous agents functioning as a digital film crew.

A. The Showrunner (Global Orchestrator)

Role: The "Brain" of the operation.

- **Agentic Action**: Scans the book. Assigns "Job Tickets" to other agents.
- **Crucial Capability**: **Dynamic Re-prioritization**. If Chapter 3 reveals a new main character, it pauses the Scene Generators.

B. The Art Department (Parallel Pre-Production)

Role: Visual Asset Generators.

- **Workflow**: Casting Agent generates Reference Images; Location Scout generates Environment LoRAs.

C. The Writers' Room (Context Swarm)

Role: The "Snoopiest" Implementation.

- **Agentic Action**: Parallel summarization with cross-chapter reconciliation.

D. The QA Critic (The Feedback Loop)

Role: The "Editor."

- **Workflow**: Rejecting bad prompts and forcing retries until output matches character state.

4. Summary of Improvements

Feature	Linear Pipeline (Old)	Agentic Swarm (New)
Processing	Sequential (Slow)	Asynchronous / Parallel (Fast)
Error Handling	Fails at end of pipe	Self-corrects mid-stream (Critic)
Context	Passive Retrieval	Active Reconciliation (Showrunner)
Cost	Wasted on bad prompts	Saved by QA rejection before render