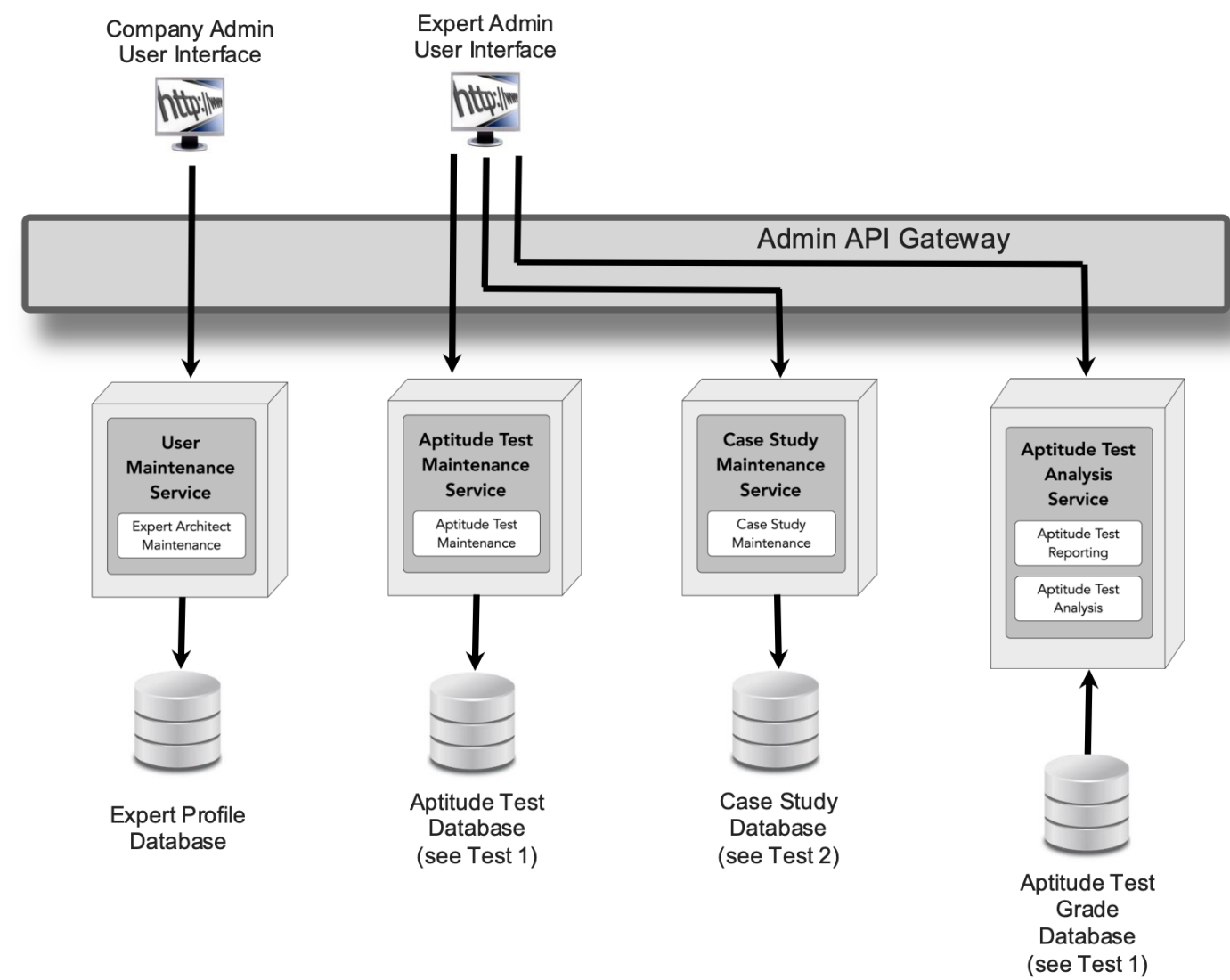
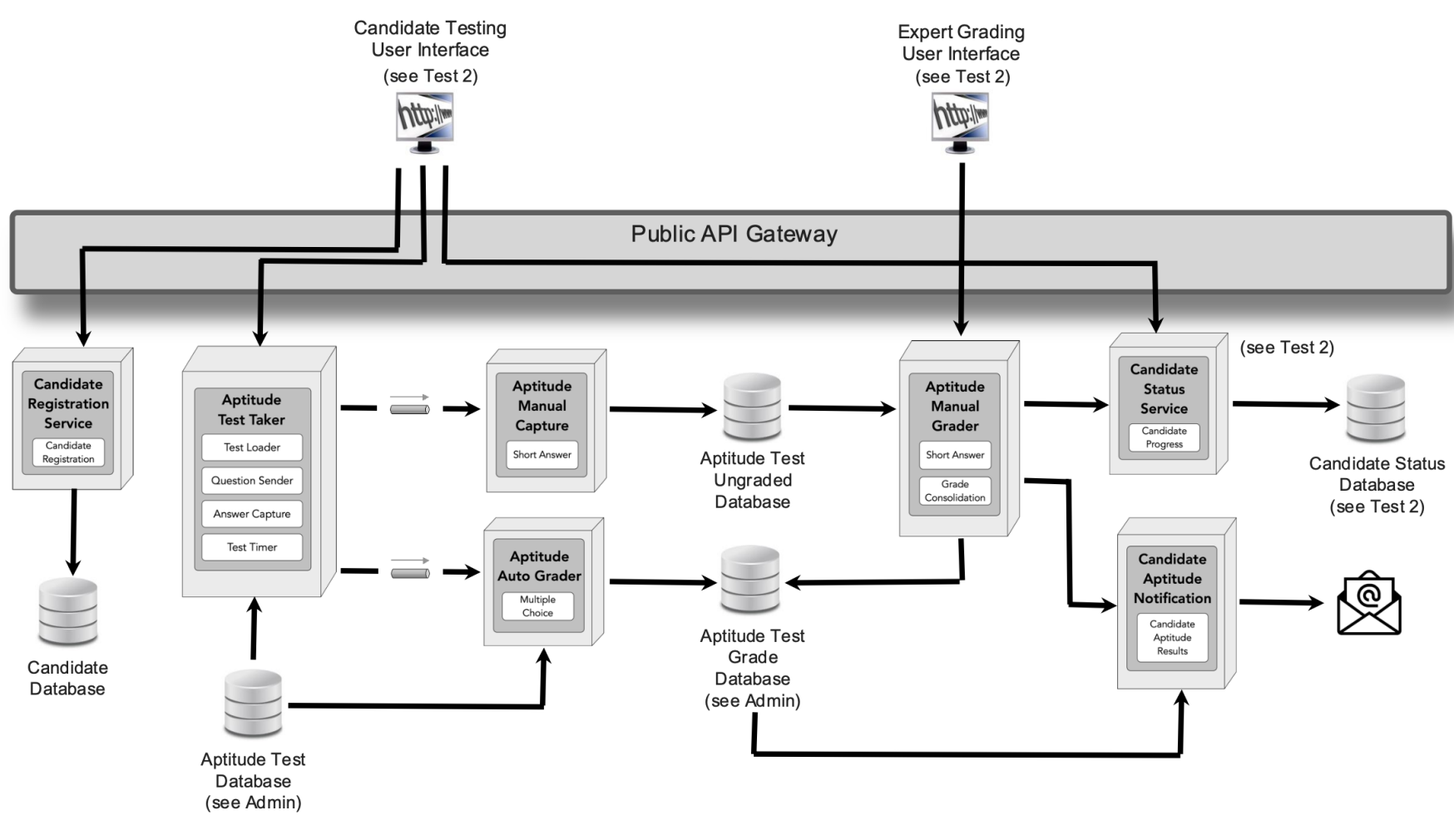


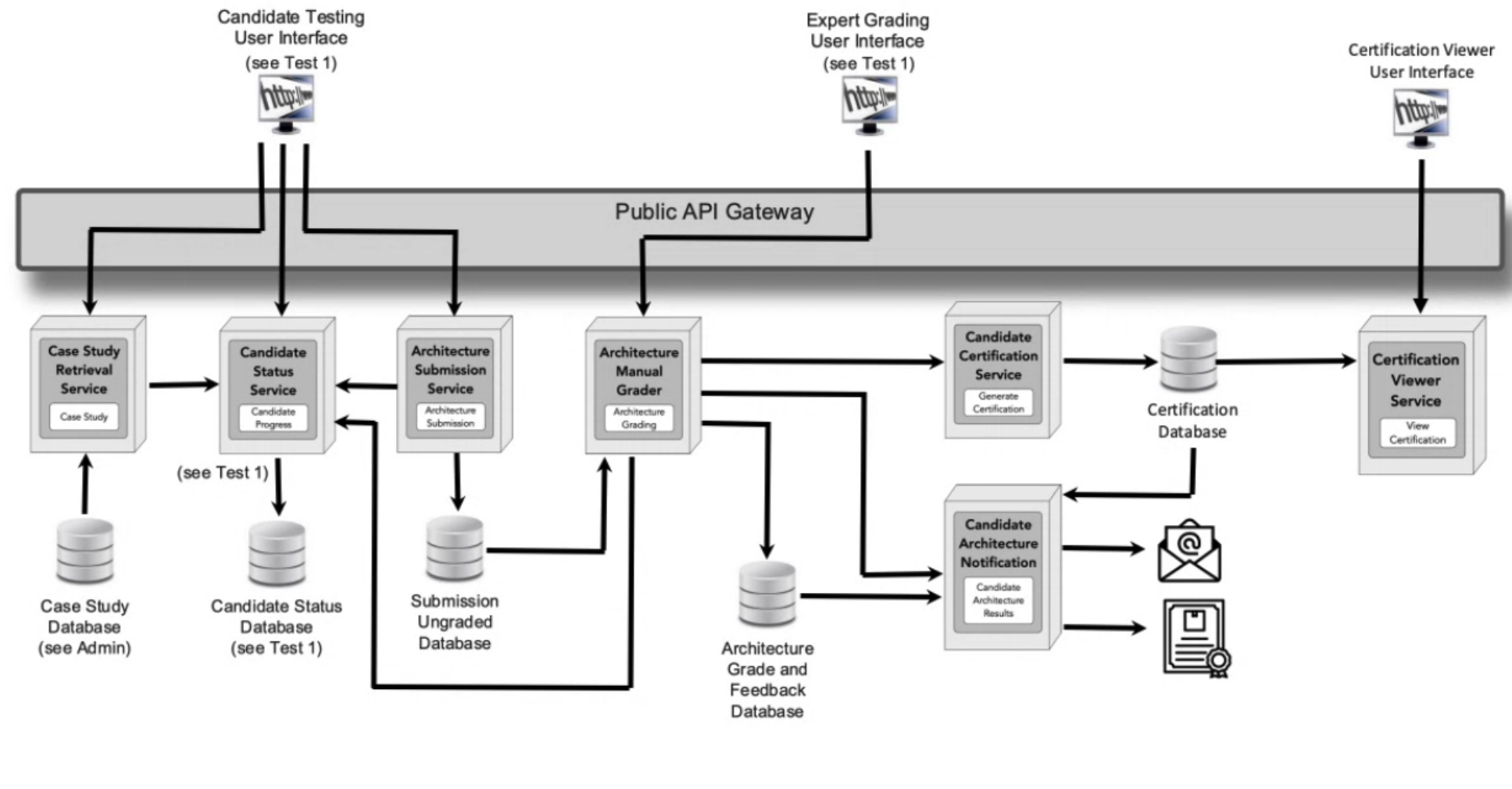
Existing Administrative Architecture



Existing Certification Testing Architecture (Test 1: Aptitude Test)



Existing Certification Testing Architecture (Test 2: Architecture Solution)



Data Aggregation Strategy:

- **Linkage:** Ensure that all data can be correlated using a unique identifier (e.g., candidate ID).
- **Historical Data:** Collect historical answers and results to allow the AI to discern patterns over time.
- **Feedback and Scores:** Use detailed feedback and scoring to refine question difficulty and relevance.
- **Continual Updates:** Regularly update the master index database with new data to keep the AI model informed.

Expert Profile Database

- **Data to Use:** Information about experts involved in grading or test preparation.
- **Purpose:** Could be used to correlate grading patterns or biases.

Experts and Candidates data will be anonymized and can be used by AI for statistics / correlations / between skills set, experience, level and success / failure rates

Candidate Database

- **Data to Use:** Basic candidate information (e.g., candidate IDs, registration details).
- **Purpose:** Identify candidates and link their test data across other databases.

Aptitude Test Database

- **Data to Use:** Information about test questions, correct answers, and potentially historical question performance.
- **Purpose:** Provide context for test questions and answers, allowing the AI to analyze question effectiveness and difficulty.

Aptitude Test Grade Database

- **Data to Use:** Graded results, including scores and feedback.
- **Purpose:** Analyze past performance to understand trends and identify common areas of difficulty or success.

Case Study Database

- **Data to Use:** Metadata about case studies used in tests and their correct solutions.
- **Purpose:** Provide additional context for scenarios presented in tests.

Submission Ungraded Database (for both Aptitude and Architecture Tests)

- **Data to Use:** Raw submissions from candidates, including both correct and incorrect answers.
- **Purpose:** Allow the AI to learn from past mistakes and successes, improving its ability to generate or modify questions.

Architecture Grade and Feedback Database

- **Data to Use:** Grading results, feedback, and manual grading insights.
- **Purpose:** Similar to the aptitude test grading data, used for understanding candidate performance and feedback trends.

Certification Database

- **Data to Use:** Certification results and completion statuses.
- **Purpose:** Track overall candidate success rates and certification achievements.

Any other 3rd party source can be added to the schema

