Twenty.com - ConvertKit Integration Web Application Spec

1. Introduction

This document outlines the specifications for a web application designed to integrate Twenty.com and ConvertKit. The primary goals of this application are to:

1. Automatic Synchronization: Automatically add new subscribers created in ConvertKit to the Twenty.com database.
2. Simplified Subscriber Addition: Provide a user-friendly web interface to easily add new subscribers to both ConvertKit and Twenty.com without requiring direct access to either platform's backend. This feature will be particularly useful in scenarios like conferences or networking events where quick subscriber addition is needed.

2. Goals

- Goal 1: Automatic ConvertKit to Twenty.com Subscriber Synchronization

  - Ensure new subscribers added to specific ConvertKit forms or segments are automatically created as contacts in Twenty.com.
  - Map relevant fields between ConvertKit and Twenty.com (e.g., email address, first name, last name).
  - Handle potential discrepancies in field names and data types between the two platforms.
  - Provide a mechanism to handle synchronization errors and retries.
- Goal 2: Easy-to-Use Web Application for Subscriber Addition

  - Develop a simple and intuitive web interface accessible via a web browser.
  - Allow users to input essential subscriber information (e.g., email address, first name, last name).
  - Optionally allow users to select specific ConvertKit forms/segments and Twenty.com lists to add the new subscriber to.
  - Provide clear feedback to the user upon successful or failed subscriber addition.
  - Implement basic security measures to protect the application and the integrated platforms.
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3. Technical Requirements

- Programming Language: Python (preferred due to existing familiarity and strong ecosystem for web development and API integrations), Node.js, or PHP.
- Web Framework: Flask (for Python), Express.js (for Node.js), or Laravel (for PHP) - a lightweight framework is sufficient for this application.
- API Access:
  - Access to the ConvertKit API (v4) using an API key or other authentication method as required. Refer to https://developers.kit.com/v4#introduction.
  - Access to the Twenty.com API using the provided API keys or webhooks. Refer to https://twenty.com/user-guide/section/functions/api-webhooks.
- Database (Optional but Recommended):
  - A lightweight database (e.g., SQLite, PostgreSQL, MySQL) to store application configuration, API credentials (encrypted), and potentially logs of synchronization activity.
- Deployment Environment: A suitable web hosting platform (e.g., Heroku, AWS, Google Cloud Platform).
- Security: Secure storage of API keys and user authentication (if necessary for the web application). HTTPS for all communication.

4. Functional Specifications

4.1. Automatic Synchronization Module

- Trigger: New subscriber creation in ConvertKit (triggered by a webhook).
- ConvertKit Event Handling: The application will need to register a webhook endpoint with ConvertKit to listen for `subscriber.create` events (or potentially other relevant events).
- Data Retrieval: Upon receiving a webhook notification, the application will use the ConvertKit API to retrieve the complete details of the new subscriber.
- Data Mapping:
  - Map the `email_address` field from ConvertKit to the corresponding email field in Twenty.com.
  - Map the `first_name` and `last_name` fields from ConvertKit to the respective fields in Twenty.com.
  - Consider mapping other relevant custom fields if necessary and configurable.
- Twenty.com Contact Creation: Utilize the Twenty.com API to create a new contact with the mapped data.
- ConvertKit Form/Segment Filtering: Allow configuration to specify which ConvertKit forms or segments should trigger the synchronization to Twenty.com.

- Error Handling and Logging: Implement robust error handling to catch API errors or data mapping issues. Log all successful and failed synchronization attempts. Implement a retry mechanism for transient errors.

4.2. Web Application Interface

- User Interface: A simple web form with the following fields:
  - Email Address (required)
  - First Name (optional)
  - Last Name (optional)
  - Optional: Dropdown to select a ConvertKit form/segment to add the subscriber to.
  - Optional: Dropdown to select a Twenty.com list to add the subscriber to.
- Submission Handling: Upon form submission:
  - Validate the email address format.
  - Use the ConvertKit API to add the subscriber to the specified form/segment (if selected).
  - Use the Twenty.com API to create a new contact with the provided information, adding them to the specified list (if selected).
- Feedback: Display a success message to the user if the subscriber is added to both platforms successfully. Display an error message if any step fails, providing relevant details if possible.
- Security: Implement basic security to prevent unauthorized access and usage (e.g., API key protection, potentially basic authentication for the web app itself depending on its intended usage).

5. Data Mapping Details

ConvertKit Field	Twenty.com Field	Notes
email_address	email	Primary identifier.
first_name	firstName	
last_name	lastName	

Custom Fields	Custom Fields	Define specific mappings as per requirements.

6. Potential Challenges

- API Rate Limits: Be mindful of the API rate limits for both ConvertKit and Twenty.com and implement appropriate strategies to avoid exceeding them.
- Data Synchronization Consistency: Ensure data consistency between the two platforms, especially when handling updates or deletions (which are not explicitly requested in this initial spec but could be considered for future enhancements).
- Error Handling Complexity: Implement comprehensive error handling for various scenarios, including API outages, invalid data, and authentication failures.
- Security of API Keys: Securely store and manage the API keys for both platforms.

7. Future Enhancements (Optional)

- Two-way Synchronization: Implement synchronization from Twenty.com back to ConvertKit.
- Subscriber Update Synchronization: Update existing contacts in Twenty.com when their information is updated in ConvertKit (and vice versa).
- Deletion Handling: Handle subscriber deletions in one platform by removing them from the other.
- More Advanced Field Mapping: Allow for more complex transformations and mapping between fields.
- User Authentication for Web App: Implement a more robust user authentication system for the web application.
- Logging and Monitoring Dashboard: Develop a dashboard to monitor the health and activity of the integration.

8. Conclusion

This specification provides a detailed overview of the requirements for building a custom integration between Twenty.com and ConvertKit. By implementing this application, the user will be able to streamline the process of adding new subscribers to both platforms, enhancing efficiency and ensuring a consistent database across systems. The easy-to-use web application will provide a convenient solution for quickly capturing subscriber information in various real-world scenarios.