Integration Flow

Below is the \*\*Integration Flow Document\*\* for the generated AIS project:  
  
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### \*\*Integration Flow Document\*\*  
\*\*Integration Name\*\*: \*\*Group Retrieval and Chatter Feed Handling\*\*  
  
#### \*\*Executive Summary\*\*  
The integration aims to retrieve Salesforce Collaboration Group details based on the group's name and manage Chatter Feed items (add new posts, avoid duplicate posts). This is achieved via Azure Functions-based microservices architecture integrated with Salesforce APIs and Aphria Authorization APIs.  
  
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### \*\*Data Flow Overview\*\*  
1. \*\*Group Retrieval\*\*  
 - \*\*Source Trigger\*\*: `HttpRequest` on `/api/group/getByName?groupName={groupName}` endpoint.  
 - \*\*Integration Services\*\*:  
 - \*\*Authorization\*\*: Calls Aphria Common API for authentication via `Authorize User`.  
 - \*\*Data Query\*\*: Executes a SOQL query (`SELECT Id FROM CollaborationGroup WHERE Name=...`) on Salesforce through `SalesforceGroupRepository`.  
 - \*\*Transformation\*\*:  
 - Converts Salesforce JSON response into a typed `Group` object.  
 - \*\*Response\*\*: Returns `Group.Id`. Responds with `404` if group is not found.  
 - \*\*Error Handling\*\*: Logs errors like missing authorization or group retrieval failures.  
  
2. \*\*Chatter Feed Item Post\*\*  
 - \*\*Source Trigger\*\*: `HttpRequest` on `/api/chatter/feed/post` endpoint.  
 - \*\*Integration Services\*\*:  
 - \*\*Authorization\*\*: Calls Aphria Common API for authentication.  
 - \*\*Access Token\*\*: Generates Chatter OAuth access token via `GenerateChatterAccessToken`.  
 - \*\*Post to Chatter\*\*:  
 - Prepares `messageSegments` for the feed.  
 - Sends a POST request with payload to Salesforce API `/services/data/v47.0/chatter/feed-elements`.  
 - \*\*Transformation\*\*:  
 - Ensures `messageSegments` payload structure matches Salesforce requirements.  
 - \*\*Response\*\*: Responds with `201` status if posting succeeds.  
 - \*\*Error Handling\*\*: Logs and returns errors when posting fails or if authentication issues occur.  
  
3. \*\*Chatter Feed Item Put\*\*  
 - \*\*Source Trigger\*\*: `HttpRequest` on `/api/chatter/feed/put` endpoint.  
 - \*\*Integration Services\*\*:  
 - \*\*Authorization\*\*: Calls Aphria Common API.  
 - \*\*Check Existing Post\*\*: Executes SOQL query (`SELECT Body FROM FeedItem WHERE ParentID=...`) to check if a similar post exists.  
 - \*\*Post Flow\*\*:  
 - If no existing post, sends a POST request to `/services/data/v47.0/chatter/feed-elements`.  
 - \*\*Transformation\*\*:  
 - Converts query result to either avoid duplicate posts or prepare a new feed.  
 - \*\*Response\*\*: Responds with `200` if Chatter post exists, `201` for newly created posts.  
 - \*\*Error Handling\*\*: Logs duplicate post checks. Handles failed authentication response errors.  
  
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### \*\*Integration Components\*\*  
#### \*\*Triggers\*\*  
| Trigger Name | Details |  
|-----------------------|-----------------------------------------------------------|  
| Group Retrieval | `/api/group/getByName` endpoint via HTTP GET request. |  
| Chatter Feed Post | `/api/chatter/feed/post` endpoint via HTTP POST request. |  
| Chatter Feed Put | `/api/chatter/feed/put` endpoint via HTTP PUT request. |  
  
#### \*\*Settings\*\*  
| Configuration Name | Keys Used |  
|-----------------------|-----------------------------------------------------------|  
| \*\*SalesforceSettings\*\*| ClientId, ClientSecret, Username, Password, BaseUrl. |  
| \*\*AphriaSettings\*\* | Authentication keys for Aphria API (`Authorize User`). |  
  
#### \*\*Functions\*\*  
| Function Name | Details |  
|--------------------------------|-------------------------------------------------------------------------|  
| \*\*GroupGetByNameFunction\*\* | Retrieves group details from Salesforce and handles 404 responses. |  
| \*\*ChatterPostFeedItemFunction\*\*| Posts new feed item to Salesforce Chatter API if messageSegments exist. |  
| \*\*ChatterPutFeedItemFunction\*\* | Checks for duplicate feeds and posts only if necessary. |  
  
#### \*\*Adapters\*\*  
| Adapter Name | Details |  
|-------------------------------------|----------------------------------------------------------------------------------------------------|  
| SalesforceGroupRepository | Executes SOQL queries on Collaboration Groups. |  
| SalesforceFeedItemRepository | Posts or retrieves FeedItem details. |  
| SalesforceAuthorizationService | Generates access tokens for Chatter interactions. |  
  
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### \*\*Flow Interactions\*\*  
#### \*\*Group Retrieval\*\*:  
1. \*\*Trigger\*\*: HTTP GET request.  
 - Input: Query parameter `groupName`.  
2. Calls Aphria API `/api/v1.0/authorization/authorize` for authentication.  
 - Input: Authorization headers.  
 - Response: Authenticated client identity.  
3. Query Salesforce API (`CollaborationGroup`) with `groupName`.  
 - Input: SOQL query with filters.  
 - Response: Group object (`Group.Id`) or `null`.  
  
#### \*\*Chatter Feed Item Post\*\*:  
1. \*\*Trigger\*\*: HTTP POST request.  
 - Input: Chatter feed payload (`messageSegments`, `subjectId`).  
2. Calls Aphria API `/api/v1.0/authorization/authorize`.  
 - Input: Authorization headers.  
3. Calls Salesforce OAuth `/services/oauth2/token` for `accessToken`.  
4. Posts Chatter feed to `/services/data/v47.0/chatter/feed-elements`.  
 - Input: Chatter payload.  
 - Response: `201` on successful post.  
  
#### \*\*Chatter Feed Item Put\*\*:  
1. \*\*Trigger\*\*: HTTP PUT request.  
 - Input: Feed ID.  
2. Calls Aphria API `/api/v1.0/authorization/authorize`.  
3. Executes Salesforce SOQL (`SELECT Body FROM FeedItem WHERE ParentID=...`) to check post existence.  
 - Input: Feed ID.  
 - Response: List of existing feed bodies.  
4. Posts Chatter feed if no existing post (`services/data/v47.0/chatter/feed-elements`).  
 - Input: Chatter payload.  
 - Response: `201` (new post) or `200` (post exists).  
  
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### \*\*Error Handling\*\*  
1. \*\*Authentication Errors\*\*:  
 - If Aphria authorization fails, log and return HTTP `401 Unauthorized`.  
2. \*\*Salesforce Query Errors\*\*:  
 - Log and return HTTP `404 Not Found` for missing groups.  
 - Handle SOQL and Chatter posting exceptions gracefully.  
3. \*\*Duplicate Feed Handling\*\*:  
 - Log duplicate post check results and return `200 OK`.  
  
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Would you like conversion into JSON/YAML format or the addition of diagrams?