AWS integration for Alchemer workflow

Overview

Amazon Web Services (AWS) is a comprehensive cloud platform that provides a wide range of services, including serverless compute, storage, and data processing capabilities. Organizations use AWS to run applications, store and manage data, integrate systems, and automate workflows without the need to provision or maintain infrastructure.

The Alchemer integration with AWS enables organizations to securely send survey and workflow data to AWS services such as AWS Lambda and Amazon S3. This allows teams to execute custom business logic through Lambda functions, store and transfer files in S3, and seamlessly connect with other systems. By automating data processing, triggering downstream workflows, enriching decision logic, and centralizing file storage, this integration helps streamline operations, reduce manual effort, and improve the scalability and reliability of business processes.

Common uses for the Alchemer AWS integration

- Push survey-generated files (CSV, JSON, attachments, or PDFs) to AWS Lambda to run custom processing logic such as validation, normalization, encryption, or format conversion.
- Send Review Action PDFs to Lambda for automated downstream workflows, including approval routing, status updates, or triggering follow-up actions in external systems.
- Push files to an S3 bucket from a publicly accessible link.

What can the Alchemer AWS integration do?

- Push file to Lambda
- Push Review Action PDF to Lambda
- Push file to S3

You will need

- AWS Lambda basic authentication credentials
- AWS IAM credentials for 'Push file to S3'
- An Alchemer plan that includes integrations and the Integration Manager permission enabled.
    - Contact us if you are unsure if your plan includes integrations.

Setup Alchemer AWS integration in workflow

AWS | Push file to Lambda

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You will need:

- AWS Lambda basic authentication credentials
- Your webhook URL

Configure the action

1. Open your workflow in **Workflow builder**.
2. On the right side, drag and drop the AWS connection where you want the action to trigger.
3. In the connection box, click the pencil icon in the top right corner.
4. Select **AWS | Push file to Lambda**.
5. **AWS | Alchemer API Credentials:** Provide your Alchemer API key, secret, and datacenter.
6. **AWS | File to push:** Select the field in this workflow that contains the file you want to push. Please choose only one.
7. **AWS | Webhook setup:** Enter your AWS endpoint.
8. Save the action.

Status codes

- 200: Outbound webhook was successfully sent
- 400: The external integration returned an error

AWS| Push Review Action PDF to Lambda

You will need:

- AWS Lambda basic authentication credentials
- Review action field value HVA & an HVA containing the name for the file

Configure the survey

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Create new or open an existing survey.

1. Add your questions to the survey.

2. Create a new page, click action and click to add the "Review" action.

3. Create another page after the review action to store the data in new Hidden Value Actions.
    - One Hidden Value Action to capture the merge code from the review action.
    - One Hidden Value Action to capture a name to be used for the file sent to Lambda. It is recommended to use the [survey("session id")] merge code as it will always provide a unique value.

Configure the action

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1. Open your workflow in **Workflow builder**.

2. On the right side, drag and drop the AWS connection where you want the action to trigger.

3. In the connection box, click the pencil icon in the top right corner.

4. Select **AWS | Push Review Action PDF to Lambda.**

5. **AWS | Select Datacenter:** Select your Alchemer Datacenter.

6. **AWS | PDF to push:** Select the fields in this workflow that contain the name of your Review Action PDF and the HVA where you are storing the Review Action PDF. See video above for instructions.

7. **AWS | URL Endpoint**: Enter your AWS endpoint that you would like to send this PDF to.

8. Save the action.

Status codes

- 200: Outbound webhook was successfully sent
- 400: The external integration returned an error

AWS| Push file to AWS S3

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You will need:

- AWS IAM credentials
- Field in this workflow that contains a URL to use to push to S3

Configure the action

1. Open your workflow in **Workflow builder**.

2. On the right side, drag and drop the AWS connection where you want the action to trigger.
3. In the connection box, click the pencil icon in the top right corner.
4. Select **AWS | Push file to AWS S3.**
5. **AWS | Authentication:** Select an existing or create a new authentication with your IAM key and secret. Provide the name of the bucket where you wish to send the file.

   Note: Only include the bucket name, do not include s3:// or any folder pathing here. Pathing will be defined in the File name. If your bucket is **alchemer-s3-bucket**, this is what you will enter in this field.
6. **AWS | Select URL:** Select the field in this workflow that contains the URL you would like to push to S3. This URL must be publicly accessible.
7. **AWS | File name**: You can set a file name, this is optional. The current UNIX timestamp will be used if no file name is set.

   Note: If your folder path and permissions are defined for **my_folder_1**, your file name should be **my_folder_1/myfile.csv**. Do not include an initial forward slash.
8. Save the action.

Status codes

- 200: Successfully pushed file
- 400: The external integration returned an error

Trusted IP Configuration

If your AWS S3 bucket requires Trusted IP access, add the following IPs to your allowed IP ranges based on your datacenter region:

US

- 52.26.59.155/32
- 52.8.7.130/32
- 52.40.200.248/32
- 52.39.10.61/32
- 18.144.153.142/32

EU

- 108.129.66.83/32
- 54.73.116.155/32
- 63.33.233.130/32
- 34.240.67.242/32

- 52.214.96.183/32
- 34.248.20.218/32

Australia / Pacific

- 3.105.252.6/32
- 54.79.191.214/32
- 3.24.148.13/32
- 13.238.151.247/32
- 52.63.118.146/32
- 13.238.47.241/32

For the latest list, refer to Tray's Public IPs documentation.

Testing and Validation

How to test

- Trigger the workflow and monitor individual runs in monitor tab in your workflow
  - Click on individual workflow runs to see metadata outputs
- Confirm the expected update or retrieval occurs in AWS.
- Use metadata for verification and debugging.

How to verify results

- Check the impacted record in AWS.
- Ensure retrieved or updated values match expectations.

Monitoring Integration Activity

Where to find logs

- Go to **Results → Monitor**
- Select a the integration step you want to inspect.

What logs display

- Input/Output

Troubleshooting

Authentication issues

- Incorrect or expired credentials
- Missing permissions in AWS Lambda or IAM

Lookup failures

- Invalid identifier values
- No matching records

Mapping errors

- Unsupported or invalid fields
- Incorrect formatting

API errors

- Validation issues
- Endpoint restrictions

FAQs

What permissions do I need?
Integration Manager in Alchemer and API permissions in AWS Lambda or IAM.
When does the integration run?
When the workflow triggers and reaches the integration step.
Can I use multiple AWS actions in one workflow?
Yes. Actions can work independently or together.
Why isn't my data updating?
Check the Action Log for lookup issues, mapping problems, or API errors.
What if I need additional functionality?
Contact Alchemer Support for enhancement requests.

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