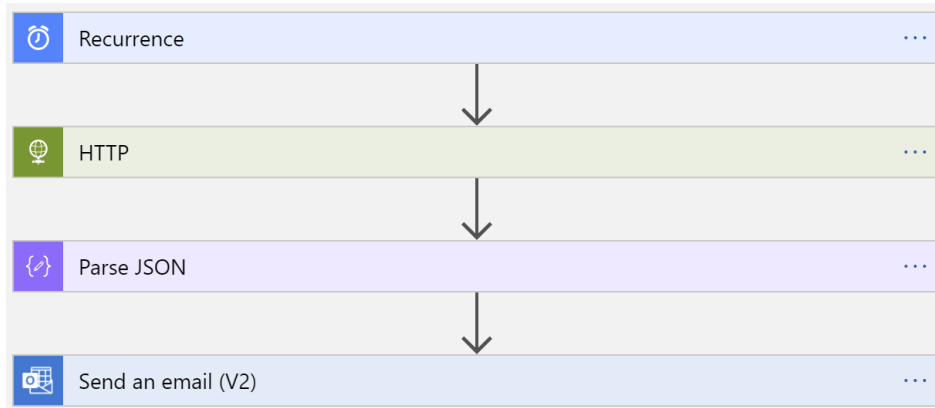


## How to generate AAD tokens automatically

In this example we will create a Logic App that can generate a JWT token from Azure AD and send it through email automatically to be used as needed.

### Design overview



### Step 1

As we see in the image above, we can start the workflow by adding a recurrence trigger.

Let's imagine we want to generate the token daily at 7:00 am, so we use the following settings:

The image shows the configuration settings for a Recurrence trigger in a Logic App. The settings are as follows:

- Interval:** 1
- Frequency:** Day
- Time zone:** (UTC-05:00) Eastern Time (US & Canada)
- At these hours:** 7
- At these minutes:** 0
- Preview:** Runs at 7:00 every day.
- Add new parameter:** (dropdown menu)

Reference:

<https://docs.microsoft.com/en-us/azure/connectors/connectors-native-recurrence>

## Step 2

By using an HTTP action, we can generate a JWT token calling the endpoint <https://login.microsoftonline.com/{tenant}/oauth2/v2.0/token>

To do this we will have to register an App in Azure AD to then use the application credentials to call the endpoint as described in the link below:

<https://docs.microsoft.com/en-us/graph/auth-v2-service>

The HTTP action settings will look like this

The screenshot shows the configuration for an HTTP action. The 'Method' is set to 'POST'. The 'URI' is 'https://login.microsoftonline.com/00000000-0000-0000-0000-000000000000/oauth2/token'. The 'Headers' section contains a table with 'Content-Type' set to 'application/x-www-form-urlencoded'. Below the headers is a table for 'Queries' with 'Enter key' and 'Enter value' fields. The 'Body' section contains a text area with the following content: 'Client\_Secret=Y.enHpA3O7PvgaVO6\_pxb.0V8gZRvT\_b-.&client\_id=5695d8ae-f8j1-2897-v512-771969b3443d&grant\_type=client\_credentials&resource=https://management.azure.com'. The 'Cookie' section has a text area with 'Enter HTTP cookie'. At the bottom, there is a dropdown menu labeled 'Add new parameter'.

Reference:

<https://docs.microsoft.com/en-us/azure/connectors/connectors-native-http>

## Step 3

In this step we will use a data operation action called Parse\_JSON to access properties of the http output to format the data we will send through email.

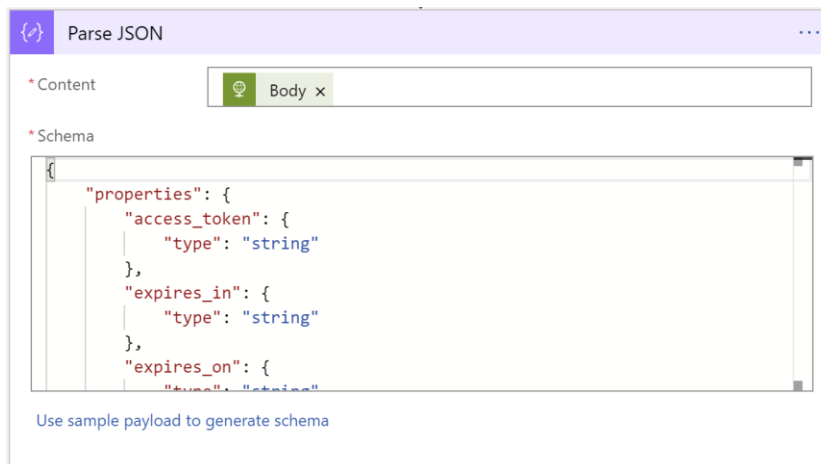
In the Content box you can add the body output from the dynamic content

The screenshot shows the configuration for a Parse JSON action. The 'Content' field is empty, with a link 'Add dynamic content' next to it. The 'Schema' field is also empty. On the right side, there is a 'Dynamic content' panel with a search bar labeled 'Search dynamic content'. Below the search bar, there is a list of dynamic content items, including 'HTTP' and 'Body'.

In the Schema box, you can use the following sample schema, Or use sample payload to generate schema.

```
{
  "properties": {
    "access_token": {
      "type": "string"
    },
    "expires_in": {
      "type": "string"
    },
    "expires_on": {
      "type": "string"
    },
    "ext_expires_in": {
      "type": "string"
    },
    "not_before": {
      "type": "string"
    },
    "resource": {
      "type": "string"
    },
    "token_type": {
      "type": "string"
    }
  },
  "type": "object"
}
```

The settings will look like this example:



Reference:

<https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-perform-data-operations#parse-json-action>

## Step 4

In the last step we will add “Send an email (V2)” action to send the token through email.

After creating the API Connection by signing in your email account, we will fill out the required fields

Here is an example:

The screenshot shows the configuration interface for the 'Send an email (V2)' action. The 'Body' field is populated with the text 'Here is your access token information:' followed by three lines of token information, each with a variable icon and a label: 'Token Type: token\_type', 'Resource: resource', and 'Access Token: access\_token'. The 'Subject' field is set to 'Token'. The 'To' field is set to 'john.doe@contoso.com'. At the bottom, there is a button labeled 'Add new parameter'.

Here is how the email looks like:

Here is your access token information:

Token Type: Bearer  
Resource: <https://management.azure.com>  
Access Token:  
eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzI1NiIsIng1dCI6ImtnMkxZczJUMENUaklmajRydDZKSXluZW4zOCIsImtpZCI6ImI  
HbSgWwJkUzQjI4TFlm8e\_kb0UpSRb2glCjVz6q-daAcK-  
Wn1h\_gqHE8AfmUcoJse66QkDaqRpA5wIE0HeRXvxsYxCrCCMGyItYiFkJIXfcj5khrPeQPg3vwhZcoOV3hrlSJkSsg8  
t7gJpD3RhvTws7WQEZ86Kuj9Tgq489x2FphSgSg142lcpxoYcczXT-EqcNhF6864ei\_OJ5YqhhcUGEnCi-DU8ep5trq  
cWVps-osYkd82Qqpg

Reference:

<https://docs.microsoft.com/en-us/azure/connectors/connectors-create-api-office365-outlook#add-an-action>

<https://docs.microsoft.com/en-us/connectors/office365/>

Once all steps are completed, you can test your logic app and you would be receiving a JWT token daily.