

# Moving files to S3 with Apache NiFi

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Apache NiFi is an open source tool that enables you to easily move and process data using a graphical user interface (GUI). In this document, we will examine a simple way to move data to the cloud using NiFi complete with practical steps.

## Create Access Key

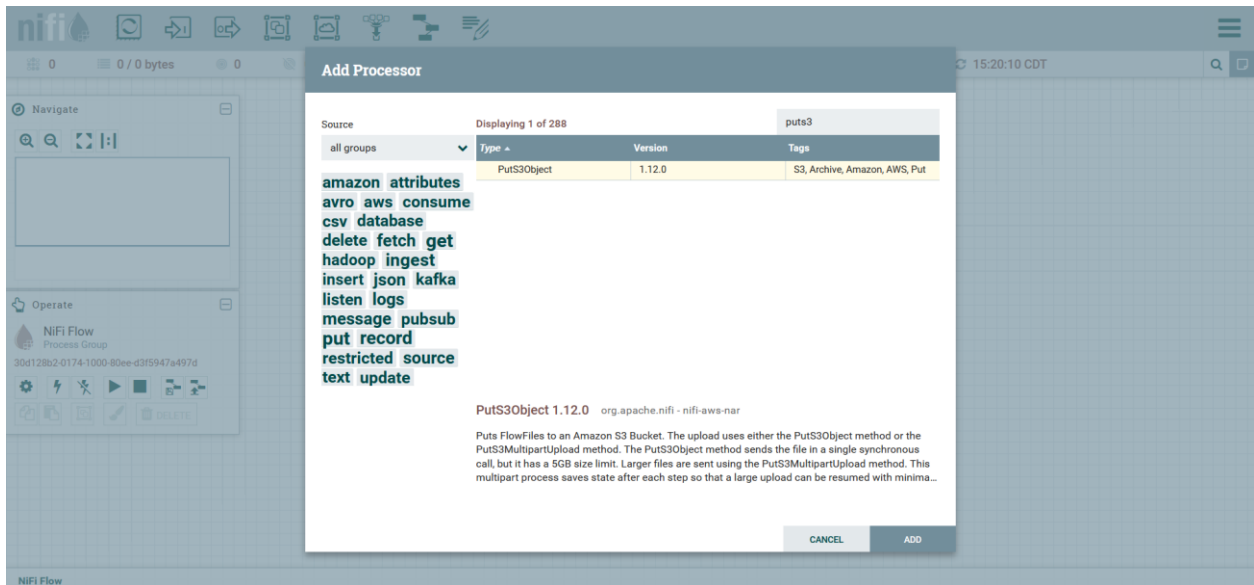
- Navigate to IAM homepage
- Select “Add user” and check “Programmatic access”
- Enter a new name such as “NiFi\_demo”
- Click “Next: Permissions”
- Click “Create Group” and you will be presented with a list of permissions you can add to this new user
- Enter a group name such as “nifi\_demo\_group”
- Next to filter policies search for S3 and check “AmazonS3FullAccess” > Click “Create Group”
- At the bottom right, select “Next:Tags” > Click through to “Next:Review”
- Click “Create user” to finish making an IAM User

## Create S3 Bucket

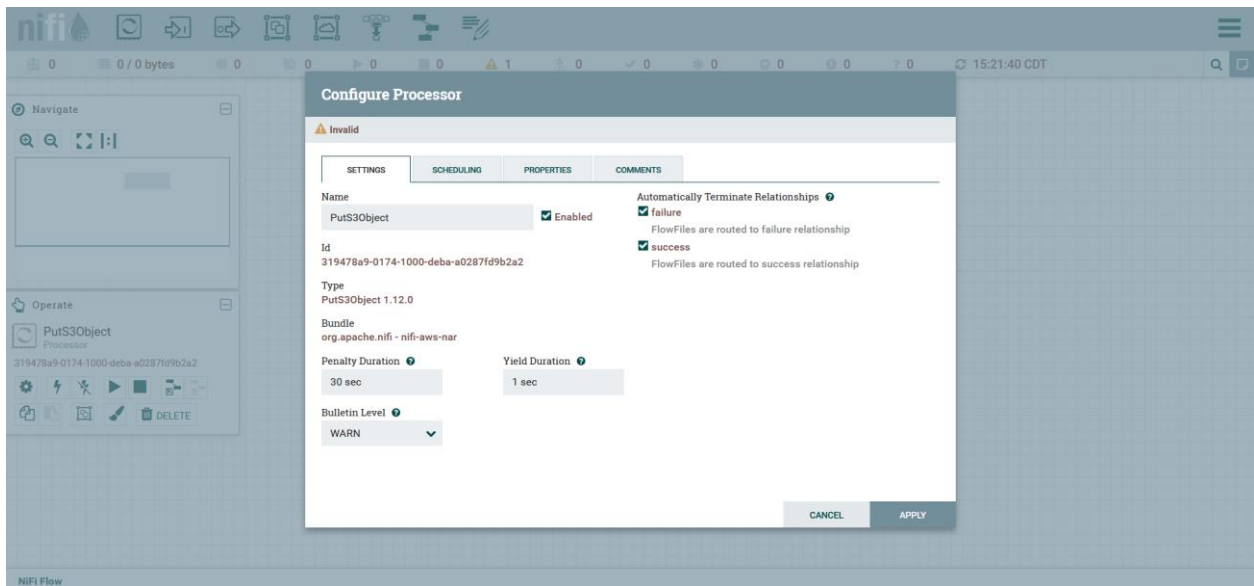
- Go to AWS S3 Console
- Click “+ Create Bucket”
- Enter a unique bucket name and the region you are creating it in
- Click through until the bucket is created (default options are fine to use)
- Click on your new bucket and you should be able to see its contents — which will be empty

## Setting up your NiFi & AWS Credential Service or Processor Controls

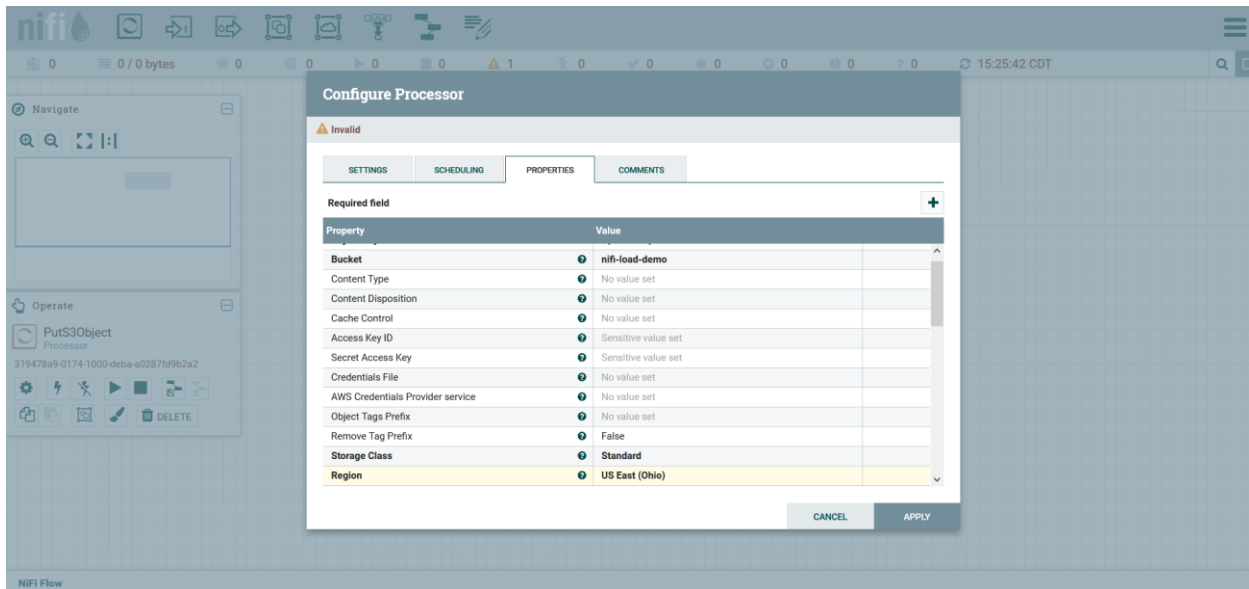
- To get started, click and drag in a new processor “PutS3Object” > right-click “Configure the processor”



- Under the Settings tab, you will see Automatically Terminate Relations > check the boxes next to “failure” and “success” since this is the last processor in the flow.



- Under the Properties tab, configure the following properties:
  - ❖ Access Key ID – From the User you created earlier and noted down
  - ❖ Secret Access Key ID – From the User you created earlier and noted down
  - ❖ Bucket – Put the name of the bucket you created
  - ❖ Region – The region your bucket is located; often U.S. East (N. Virginia)

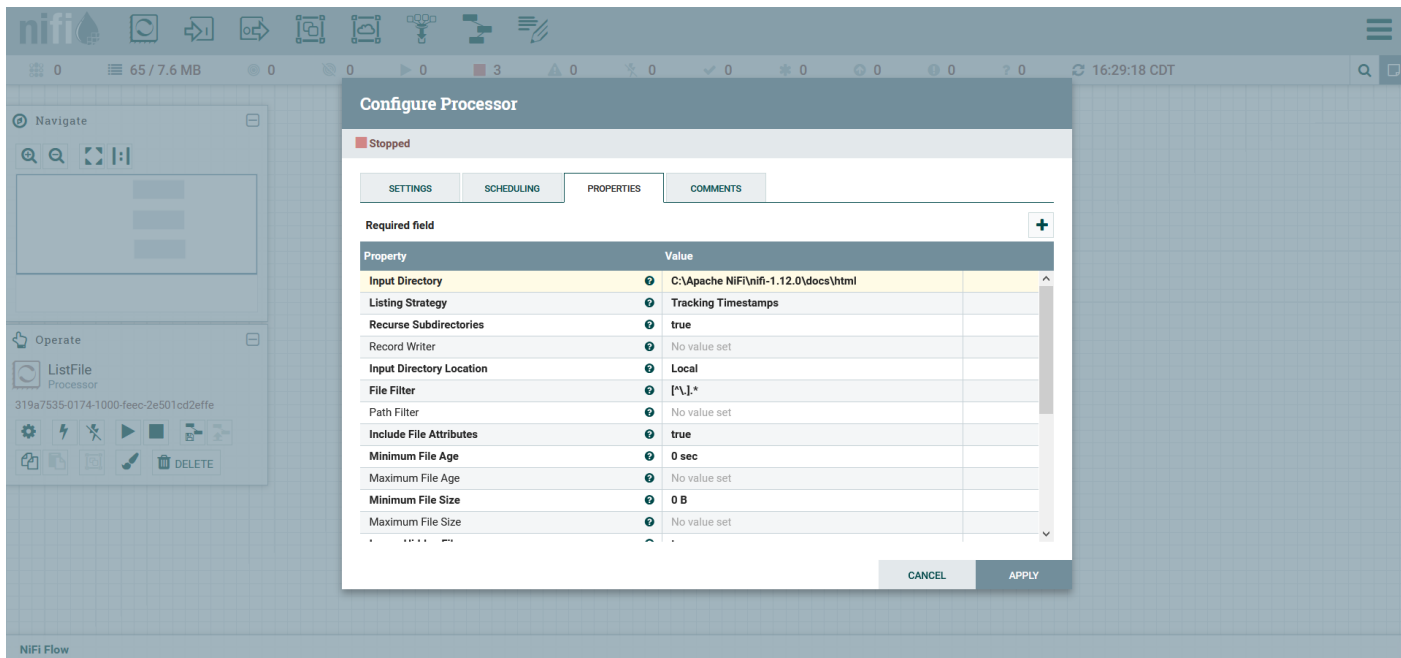


- Click “Apply” to finish up configuring the processor.

## Setting Up Your Flow

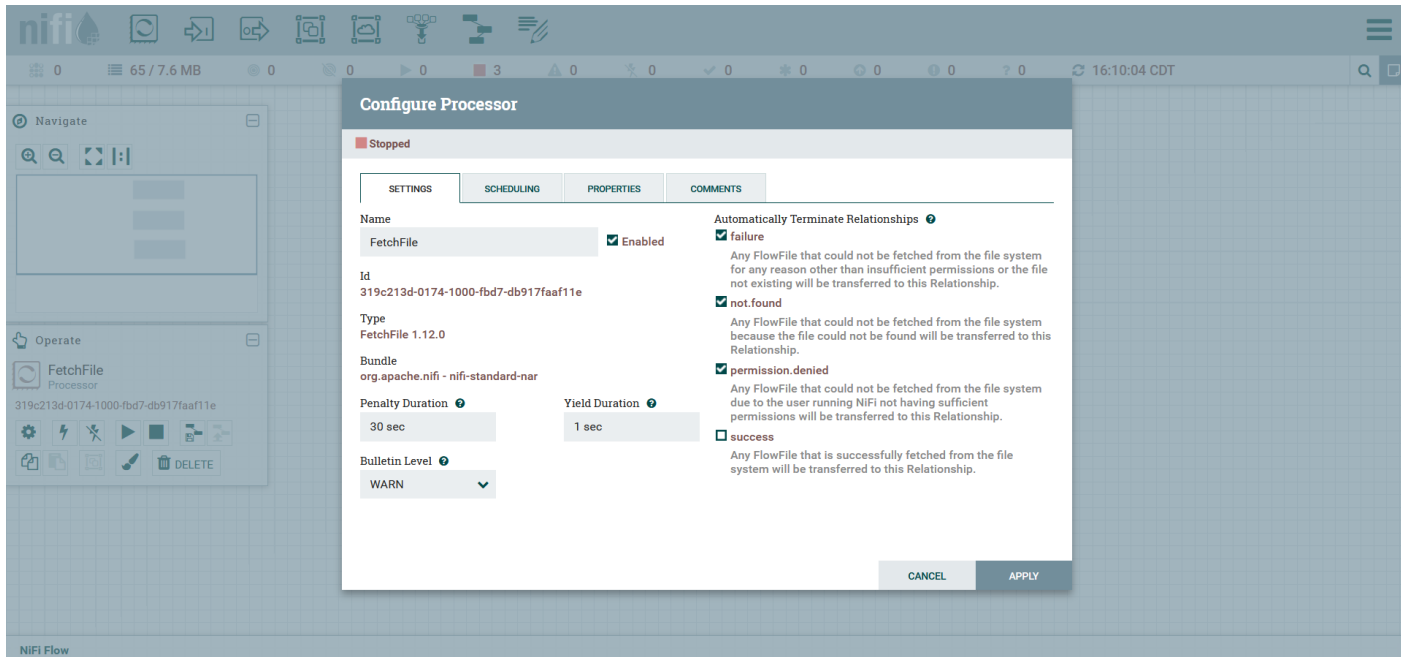
### ListFile

- Properties** tab – Set “Input Directory” to /nifi/docs/html
- Drag a connection from ListFile to FetchFile for relationship success



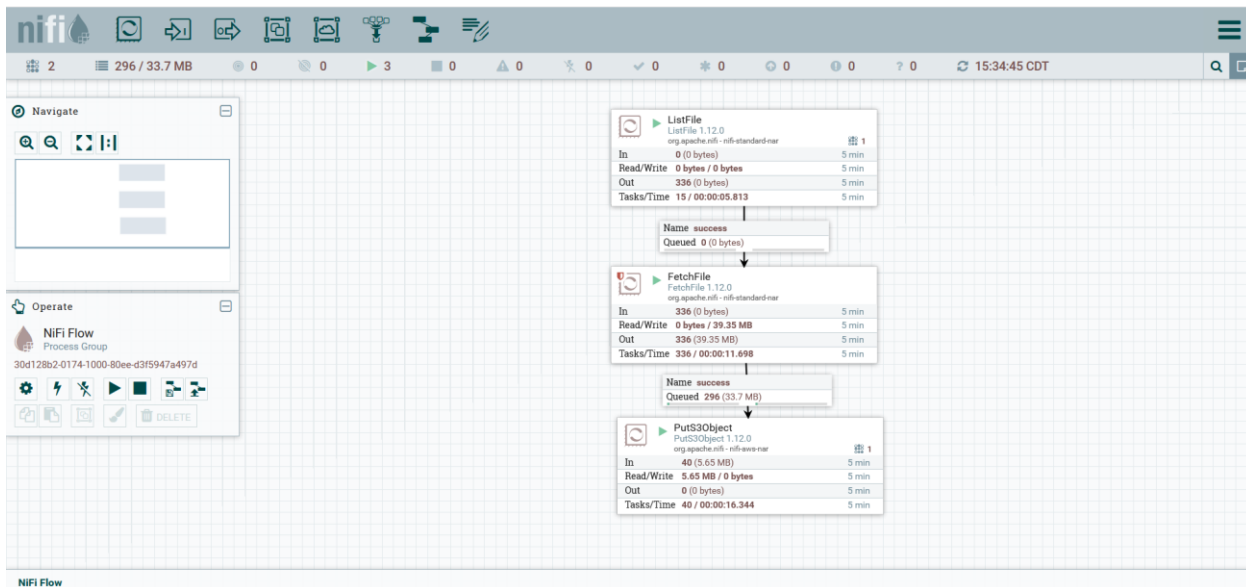
## FetchFile

- **Settings** tab – Check the boxes next to “Failure,” “not.found,” \* “permission.denied”
- Drag a connection from FetchFile to PutS3Object for relationship success



## Running Your Flow

- Right-click each of the processors > click “Start”
- Let this run for a few seconds. If you want to track the progress, right-click into any blank space of your NiFi canvas and press “refresh.” You should see each processor reporting flowfiles “in” and “out”
- For the purpose of this demo, right-click “Stop list files.” In production, you can leave this task running, but it is always best to stop demos when done. This stops the demo from producing sample files after you stopped using the program.



## Viewing the Objects in S3

