

Hand Off Document

View Deployment:

<https://main.d2bkww882j30jj.amplifyapp.com/>

View Github Repository:

<https://github.com/TaoHuang0/Kinetik>

Video Tutorials:

https://youtu.be/RmUO-zQk1_U

* We will meet with our client in person and do the following steps to transfer the application and associated AWS resources to his account.

Set Up Project Locally:

We will help our client to clone the repository to his environment. The Kinetik Simulation application is not a stand-alone project. Instead, The Kinetik Simulation project is currently hosted on AWS Amplify, connected to a Github repository, and to clone it locally, follow these steps:

Cloning the Kinetik Simulation project

1. Open the GitHub repository <https://github.com/TaoHuang0/Kinetik> in a web browser and locate the green “Code” button in the top right corner of the page.
2. Click on the “Code” button to open a dropdown menu.
3. From the dropdown menu, select the “HTTPS” option to obtain the repository URL in HTTPS format.
4. Copy the repository URL to the clipboard.
5. Open a terminal or command prompt on your local machine.
6. Navigate to the directory where you want to clone the repository using the command `cd` followed by the directory path.
7. Type the following command to clone the repository to your local machine: `git clone <REPO URL YOU JUST COPY>`
8. Press Enter to execute the command. Git will download the repository to your local machine.
9. After the cloning process is complete, navigate to the cloned repository directory using the command `cd`.
10. Now, you can install the project dependencies using the appropriate package manager yarn.

Installation

1. Open a terminal or command prompt on your local machine.
2. Navigate to the cloned repository directory using the command `cd`.
3. Install the project dependencies using `yarn install`

4. Wait for the installation process to complete. Once completed, you can run the project locally on your machine.

To run the Kinetik Simulation Application locally using AWS Access Keys, you will need an AWS account with appropriate permissions to access the lambda and API resources the app uses, AWS Access Keys for the account you will be using, Node.js and npm installed on your computer, and the Amplify CLI installed on your computer. We will help our client with this. Follow these steps to run the app:

AWS Account Set Up:

Before you can run this Amplify app locally using AWS Access Keys, you will need to have the following:

1. An AWS account with appropriate permissions to access the lambda and API resources this app uses
2. AWS Access Keys for the account you will be using
3. Node.js and npm installed on your computer
4. The Amplify CLI installed on your computer

Setting Up Your AWS Access Keys:

To set up your AWS Access Keys, follow these steps:

1. Log in to your AWS account.
2. Navigate to the [IAM Dashboard](#).
3. Click on [Users](#) in the left-hand menu.
4. Click on your user name to open your user details.

5. Click on the **Security credentials** tab.
6. Click on **Create access key** to create a new access key.
7. Download the access key file or copy the access key ID and secret access key.

Running This Amplify App Locally

To run your Amplify app locally using AWS Access Keys, follow these steps:

1. Clone your Amplify app's repository to your local machine.
2. Open a terminal window and navigate to the root directory of your app.
3. Run `amplify init` to initialize the Amplify project.
4. Run `amplify configure` to configure your AWS Access Keys. Enter the access key ID and secret access key that you obtained earlier, and choose the appropriate region for your app.

Run `amplify push` to deploy your app's backend resources to AWS.

Finally, run the Kinetik Simulation locally on your laptop:

Start With Development Server

1. Open a terminal or command prompt on your local machine.

2. Navigate to the cloned repository directory using the command `cd`.
3. Start the development server using the appropriate command.

```
npm start
```

4. Wait for the development server to start. Once started, you can view the project in your web browser by navigating to the appropriate URL, typically <http://localhost:3000>.

Your app should now be running locally and using your AWS resources. If you encounter any issues, consult the Amplify documentation or reach out to the Amplify community for support.

Please refer to the User Manual for more information on how to use the Kinetik Simulation Application. If you encounter any issues, consult the Amplify documentation or reach out to the Amplify community for support.

Notes:

- The setup guide is also included in GitHub readme.
- Push to the main branch of the GitHub repo to automatically start a new build on the webpage.
- The main branch is protected, you are not able to directly push to the main branch. Instead, you should

do a pull request to merge anything new to the main branch.

Potential Issues to discuss with clients:

- Discuss and explain the input .csv template with Mr. Hughes
- Meet with the client and migrate the AWS account to him.

Cost and Ownership:

As the app is currently hosted on AWS Amplify and using AWS Lambda Function, there may be ongoing costs associated with using AWS services, such as hosting, storage, and data transfer. The cost for AWS lambda services is free for the first 1 million read/write, and then \$0.02 for each additional 1 million read/write. For right now, we should be fine with the free version of AWS Lambda. Here is the AWS Lambda pricing category, for more information about AWS Lambda pricing, please visit <https://aws.amazon.com/lambda/pricing/>.

AWS Lambda Pricing

Region:

Architecture	Duration	Requests
x86 Price		
First 6 Billion GB-seconds / month	\$0.0000166667 for every GB-second	\$0.20 per 1M requests
Next 9 Billion GB-seconds / month	\$0.000015 for every GB-second	\$0.20 per 1M requests
Over 15 Billion GB-seconds / month	\$0.0000133334 for every GB-second	\$0.20 per 1M requests
Arm Price		
First 7.5 Billion GB-seconds / month	\$0.0000133334 for every GB-second	\$0.20 per 1M requests
Next 11.25 Billion GB-seconds / month	\$0.0000120001 for every GB-second	\$0.20 per 1M requests
Over 18.75 Billion GB-seconds / month	\$0.0000106667 for every GB-second	\$0.20 per 1M requests

The cost of AWS Amplify is vary, there is no cost for build & deploy for up to 1,000 build minutes per month. After that, the build & deployment cost is \$0.01 per minute. Here is the AWS Amplify pricing category, for more information about AWS Amplify pricing, please visit <https://aws.amazon.com/amplify/pricing/>.

Host an app

Free for 12 months

Easily deploy your web app or website to the fast, secure, and reliable AWS content delivery network (CDN) using Amplify Hosting.

BUILD & DEPLOY

No cost up to 1,000 build minutes per month

DATA STORAGE

No cost up to 5 GB stored on CDN per month

DATA TRANSFER OUT

No cost up to 15 GB per month

REQUEST COUNT (SSR)

No cost up to 500,000 requests per month

REQUEST DURATION (SSR)

No cost up to 100 GB-hours per month

The free offer is per account, regardless of number of users. It expires at the end of your 12-month AWS Free Tier term then converts to pay as you go.

Host an app

Pay as you go

Need more capacity than the free tier? Amplify switches over to pay as you go pricing once you exceed free tier limits, with no disruption to your apps.

BUILD & DEPLOY

\$0.01 per minute

DATA STORAGE

\$0.023 per GB per month (this charge recurs until the app is deleted)

DATA TRANSFER OUT

\$0.15 per GB served

REQUEST COUNT (SSR)

\$0.30 per 1 million requests

REQUEST DURATION (SSR)

\$0.20 per hour (GB-hour)

Cost effective, no flat fee per user. Includes multiple sites per project and public SSL certificates at no additional cost.