Graph.Build Studio Usage Instructions

These instructions help you deploy, configure, and run Graph.Build Studio from the AWS Marketplace Quick Create CloudFormation template.

Graph.Build Studio provides a browser-based user interface. The stack creates the AWS networking, ECS host, load balancer, persistent storage, and container service required to run the application.

Launch With Quick Create

Use the AWS CloudFormation Quick Create link:

https://us-east-1.console.aws.amazon.com/cloudformation/home?region=us-east-1#/stacks/create/review?templateURL=https://data-lens-cloudformation.s3.us-east-1.amazonaws.com/monthly-licensed-products/graph-build-studio.yaml&stackName=GraphBuildStudio

On the Quick Create page:

1. Confirm the stack name, or enter your own name.
2. Choose the deployment region. If you change the region, set the `AWSRegion` parameter to the same region.
3. Choose an `InstanceType`. The default is suitable for a small deployment. Larger instance types provide more memory and CPU for Studio.
4. Set `EnableCloudFront` to `true` if you want an HTTPS CloudFront URL. Leave it as `false` to use the Application Load Balancer HTTP URL.
5. Acknowledge that CloudFormation will create IAM resources.
6. Choose **Create stack**.

Deployment usually takes several minutes. Wait until the CloudFormation stack status is `CREATE_COMPLETE`.

Access The Studio UI

After the stack is created:

1. Open the CloudFormation console.
2. Select your Graph.Build Studio stack.
3. Open the **Outputs** tab.
4. Copy the value of `StudioEndpoint`.
5. Open that URL in a web browser.

If `EnableCloudFront` is `true`, the endpoint will be an HTTPS CloudFront URL. If `EnableCloudFront` is `false`, the endpoint will be an HTTP Application Load Balancer URL.

Sign In

The default username is: `admin`

The admin password is generated automatically during stack creation and stored in AWS Secrets Manager.

To retrieve it:

1. Open the CloudFormation stack **Outputs** tab.
2. Open the `StudioAdminPasswordSecret` link.
3. In Secrets Manager, choose **Retrieve secret value**.
4. Use the displayed secret value as the `admin` password.

There is no static or default password in the template.

After signing in for the first time, change the admin password in Studio if your organisation requires password rotation.

SSH Access

SSH access is intentionally not enabled for this product.

The stack does not ask for an EC2 key pair, does not open port `22`, and places the ECS host in a private subnet. This follows AWS Marketplace guidance to avoid administrative access from the internet.

For troubleshooting, use:

- The CloudFormation **Events** tab to check deployment progress.
- The ECS console to inspect the cluster, service, task, and container status.
- CloudWatch Logs for application logs. The log group is named `/ecs/<stack-name>`.
- EC2 status checks for the ECS host instance.

If you require host-level access, create a modified template only after reviewing your organisation's security requirements. Do not open SSH to `0.0.0.0/0`.

Monitoring And Health

To verify the deployment:

1. Check the CloudFormation stack status is `CREATE_COMPLETE`.
2. Open the ECS console and confirm the service has one running task.
3. Open the EC2 console and confirm the ECS host instance has passed status checks.
4. Open the `StudioEndpoint` output in a browser.
5. Review CloudWatch Logs if the UI does not load.

Studio stores application data on the persistent EFS filesystem mounted inside the containers at:

```
None
/app/studio-data
```

This directory includes the Studio database and related persistent data. To preserve Studio data during an upgrade:

1. Prefer updating the existing CloudFormation stack with the newer template or image tag instead of deleting and recreating the stack.
2. Before upgrading, make a backup of the Studio data stored under `/app/studio-data`. You can do this using your normal AWS backup process for EFS, such as AWS Backup or an EFS backup plan.
3. Do not delete the EFS filesystem if you need to keep existing Studio projects, users, or configuration.
4. After the upgrade completes, open `StudioEndpoint`, sign in, and confirm your existing data is available.

If you delete the stack, CloudFormation may also delete resources created by the stack, including persistent storage. Back up important data before deleting or replacing the stack.

CloudFormation Delivery Information

- All sensitive information remains in your AWS account. The generated Studio admin password is stored in AWS Secrets Manager and is not shared with Graph.Build.
- IAM roles and policies are created for the ECS host and ECS task. These allow the EC2 instance to join the ECS cluster, allow the ECS task to pull container images, write logs to CloudWatch, read the generated Secrets Manager password, access required AWS services, and use AWS License Manager for Marketplace license checks.
- Network resources include a new VPC, two public subnets for the Application Load Balancer, one private subnet for the ECS host, an Internet Gateway, a NAT Gateway with Elastic IP for outbound access, route tables, and security groups.
- Compute resources include one ECS cluster, one EC2 Auto Scaling Group with a single ECS-optimized EC2 host, one ECS task definition, and one ECS service running the Studio UI and Studio Node containers.
- Storage resources include an encrypted EFS filesystem and EFS access point mounted at `/app/studio-data` for persistent Studio data.

- Access resources include an internet-facing Application Load Balancer. If `EnableCloudFront` is set to `true`, the template also creates a CloudFront distribution for HTTPS access.
- Logging resources include a CloudWatch Logs log group named `/ecs/<stack-name>`.

Resource	$ hourly	$ month
t2.medium	0.0464	33.87
EBS Volume 30GB	0.0032	2.4
Detailed monitoring	0.0032	2.4
Application LoadBalancer	0.0225	16.43

Deleting The Stack

Deleting the CloudFormation stack removes the AWS resources created by the template. If you need to preserve data, back up important Studio data before deleting the stack.

Support And Documentation

For product documentation and support, contact `support@graph.build` or visit https://docs.graph.build.