CloudLaunch Deployment Walkthrough

CloudLaunch is a web application that provides a quick, user-friendly interface for launching pre-configured virtual appliances.

Notes:

- While there are many options presented in the CloudLaunch interface, only the listed ones are necessary for deploying the <u>G-OnRamp AMI</u>; the other options can be safely ignored (even if presented in red text).
- Depending on your AWS account settings, you may have a limit on the number of instances you can launch in a given time; if you see 'Pending...' without any address info, you may have hit the limit.

Requirements

- Amazon Web Services account
 - Access Key ID and Secret Access Key

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Log in to CloudLaunch

Logging in to the CloudLaunch application allows you to keep a record of your security credentials and launched images for convenience.

- Navigate to the CloudLaunch website at launch.usegalaxy.org
- In the navigation header bar, select 'Login'



• Authenticate using one of a list of credentials (Facebook, Google, Github, Twitter)

Configure Deployment

CloudLaunch by default launches pre-configured virtual appliances to desired services. While it can deploy a G-OnRamp instance, it was not explicitly designed to do so. As such, certain options must be specifically configured, and certain options need not be configured at all. *Any features not mentioned in this walkthrough are not necessary for G-OnRamp deployment*.

• Select the 'Ubuntu' from the list of selections in the Appliance Marketplace

ubuntu[®] Ubuntu Ubuntu operating system

· Choose 'Amazon' as your cloud service provider

On which cloud would you like to launch your appliance? Amazon US East 1 - N. Virginia

• Enter your AWS credentials, then click 'TEST AND USE THESE CREDENTIALS'

What is your Amazon Web Services access key ID? TEST_CREDENTIALS_NOT_REAL

Your AWS Access Key can be obtained by following the instructions in the link above.

What is your Amazon Web Services secret key?

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- After the credentials are verified, click 'NEXT >'
 - Appliance version is irrelevant, as we will be specifying a custom G-OnRamp appliance instead
- Either keep the automatically-generated name or choose something more descriptive

Provide a name for your deployment

my G-OnRamp instance

- Storage type and size may be ignored, as this pertains to the default Galaxy instances CloudLaunch uses. Changing these values would have no impact on the G-OnRamp deployment.
- Select hardware type from the 'What type of virtual hardware would you like to use?' drop-down menu -- recommended minimum is c4.xlarge.
 - most G-OnRamp activities are CPU-dependent; at least 4 CPUs are recommended for data processing and multiple simultaneous users browsing the web instance. Details on various hardware configurations and their pricing can be found at <u>aws.amazon.com/ec2/pricing/on-demand/</u>

What type of virtual hardware would you like to use? c4.xlarge 4 VCPUs 7.5 GB RAM 0 GB Disk

- Click on 'Advanced cloud launch options' to enable further customization
 - Of the expanded options, only 'Custom Image ID' is necessary; the rest can be disregarded.



Advanced cloud launch options

- In the 'Custom Image ID' field, enter the G-OnRamp AWS AMI ID
 - note: AMI ID subject to change, as a new ID is generated on every update. For the latest update, visit <u>github.com/goeckslab/ansible-gonramp/blob/dev/AWS_AMI.md</u>

Custom Image ID

A custom image ID if you want to override the preconfigured Image ID

Launch Instance

Once the necessary configuration parameters have been set, the instance is ready for deployment to a cloud server.

- Click 'Launch'
- After a few minutes, your G-OnRamp instance will **Running** and ready for access
 - While **Progressing**:

Name		Created	Status
a_gonramp_instance Appliance: Ubuntu Cloud: amazon-us-ea	Version: 16.04 (with Docker) ast-n-virginia	a few seconds ago	 PROGRESSING Waiting for instance i- 01df0470759fe5310

• Once Ready, access server by navigating browser to Access address

Name	-	Created	Status	Access address
a_gonramp_instance Appliance: Ubuntu Cloud: amazon-us-e	Version: 16.04 (with Docker) east-n-virginia	a few seconds ago	7 RUNNING	107.23.86.228 අ

note: these are example entries; the actual address of the freshly-launched instance will be different

Final Comments

- As soon as an instance is launched, it will begin to incur charges. In order to start, stop or terminate the instance, you will need to log in to the Amazon Web Services Console with the credentials associated with the AWS access key ID and secret key entered earlier.
- For a more detailed installation allowing for more customization, please refer to the AWS Walkthrough online at:
 - <u>https://github.com/goeckslab/ansible-</u> <u>gonramp/blob/dev/AWS_WALKTHROUGH.md</u>