



Test Automation Made Easy

USER MANUAL FOR PROVISIONING WEB IDE ON AWS

Accelerate, Improve and plan success with an efficient code.

<https://www.nimbal.io/>

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NIMBAL AUTO WEB IDE

Start automating your software tests with our comprehensive, out-of-the-box automation framework. The Nimbal Auto Framework combines the best Open-Source tools to make a powerful and comprehensive test automation solution. Our easy-to-learn, high-value, and low-cost solutions are guaranteed to give you quick results that enable you to release your software confidently. Test Automation is daunting, Nimbal makes it Easy.

Why this document is required?

To provision Web IDE on AWS for testers in an organization.

PRODUCT OVERVIEW

Automating software testing does not need to be an expensive and tedious task. With Nimbal Auto we've addressed the main issues with Automation namely time taken to build and maintain a framework, costs involved, complexity, scalability, and skills gaps. Our out-of-the-box and comprehensive framework use a low code, simple English (Gherkin) language to write test cases. We have simplified the process even further by pre-building most of the commonly used test cases. The Nimbal Auto Framework is Java-based; therefore, it can run compiled code easily at scale. Nimbal Auto is agnostic of operating systems, browsers and any other devices, so you can leverage our platform for most use cases, you can run tests for all OS, browsers, and devices. The containerized Web-Integrated Development Environment (IDE) allows you to run your software tests from anywhere and with any device as long as you have internet access.

KEY HIGHLIGHTS

A comprehensive framework that enables you to run end-to-end automation in one single test. No need to be a specialist in Selenium, Appium, Rest Assured, JMeter, Databases etc. Works with any CI/CD, any code repositories and runs on AWS Device Farm.

No Set-up time, Low-learning and Low-Code framework with pre-built tests and dropdowns which enable you to start automation from the first day.

Use the Nimbal Management Portal - Nimbal Tree to tag test cases, schedule, and initiate test cycles using tags, check results at a step level using screenshots, view live test runs, and record with our built-in Selenium Grid (tool for authoring functional tests without the need to learn a test scripting language). Manage Manual tests including push test to AWS Mechanical Turk (Crowd Source) and collate results.

PRE-REQUISITE:

1. Amazon Web Services Cloud computing web offers numerous primary abstract technical infrastructure and constructing blocks and tools

a. AWS VPC Cloud

Amazon Virtual Private Cloud (Amazon VPC) enables you to launch AWS resources into a virtual network that you've defined. This virtual network closely resembles a traditional network that you'd operate in your own data center, with the benefits of using the scalable infrastructure of AWS.

- Official Document: [Get started with Amazon VPC - Amazon Virtual Private Cloud](#)

b. Public Subnet

Amazon Elastic Container Service (Amazon ECS) is a highly scalable, fast container management service that makes it easy to run, stop, and manage containers on a cluster. Your containers are defined in a task definition that you use to run individual tasks or tasks within a service. A public subnet is a subnet that's associated with a route table that has a route to an internet gateway. An internet gateways. This connects the VPC to the internet and to other AWS services.

- Official Document: [Tutorial: Creating a VPC with Public and Private Subnets for Your Clusters - Amazon Elastic Container Service](#)

c. ECS Cluster

AWS ECS cluster is a **logical grouping of tasks or services**. Amazon ECS can be used to create a consistent build and deployment experience, to manage and scale batch and Extract-Transform-Load (ETL) workloads, and to build sophisticated application architectures

- Official Document: [Getting started with Amazon ECS - Amazon Elastic Container Service](#)

2. If open internet access is restricted (for downloading), Whitelist the following URLs for Nimbal Web IDE including its subdomains.

- *.bitbucket.org
- *.mvnrepository.com
- *.apache.org
- *.github.com
- *.nimbal.io
- *.nimbal.co.nz
- *.googleapis.com

SUBSCRIPTION PROCESS:

In order to access the Web IDE, a current subscription is required on AWS.

Follow the steps to subscribe to the AWS services of Nimbal: -

1. Login to AWS Console by [Clicking Here](#)



Figure 1: Login Page

2. Search “AWS Marketplace Subscriptions” service

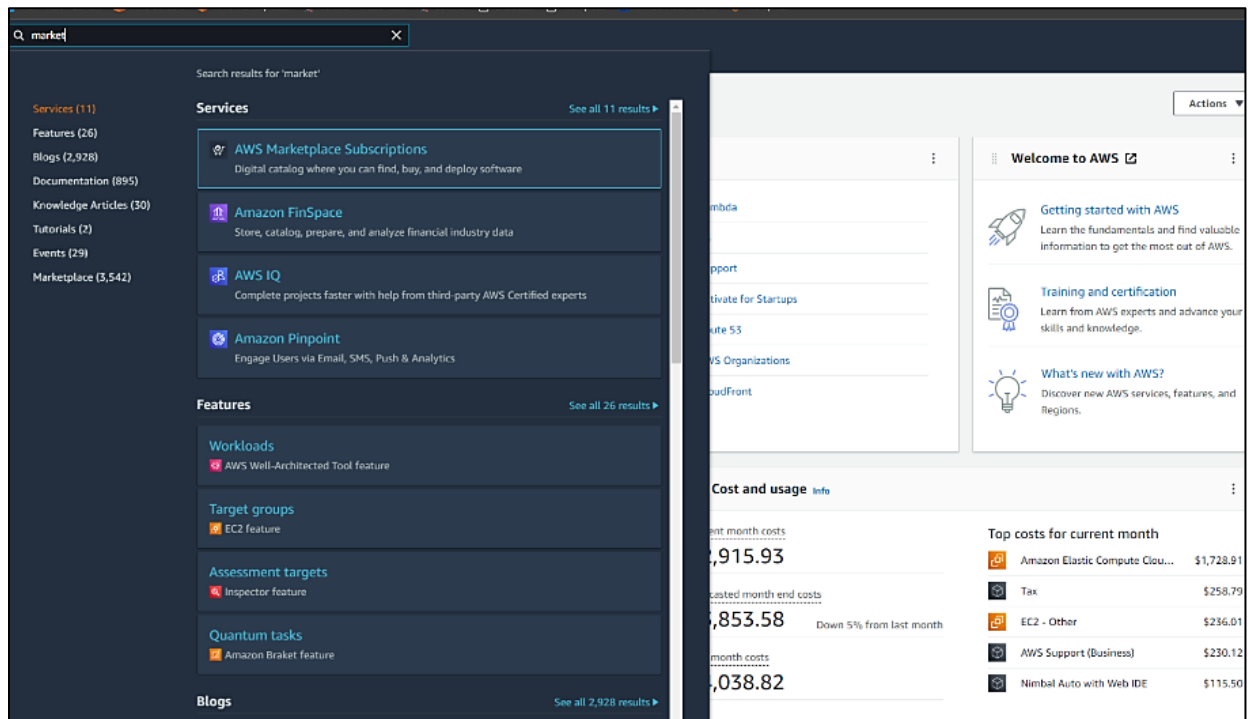


Figure 2: AWS Management Console

3. Click on “Discover Products” from left column and then search for “Nimbal Auto with Web IDE” under - Search AWS Marketplace products

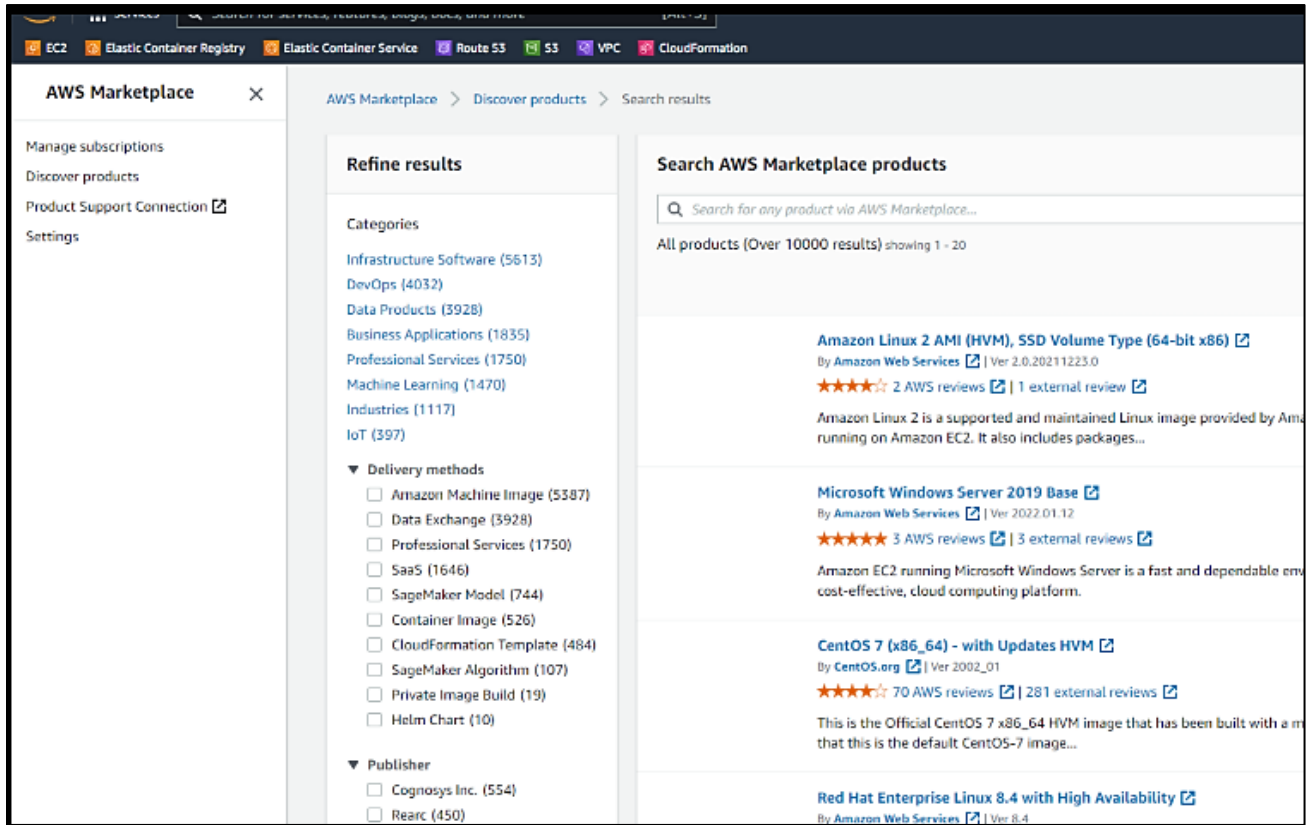


Figure 3: Discover Search

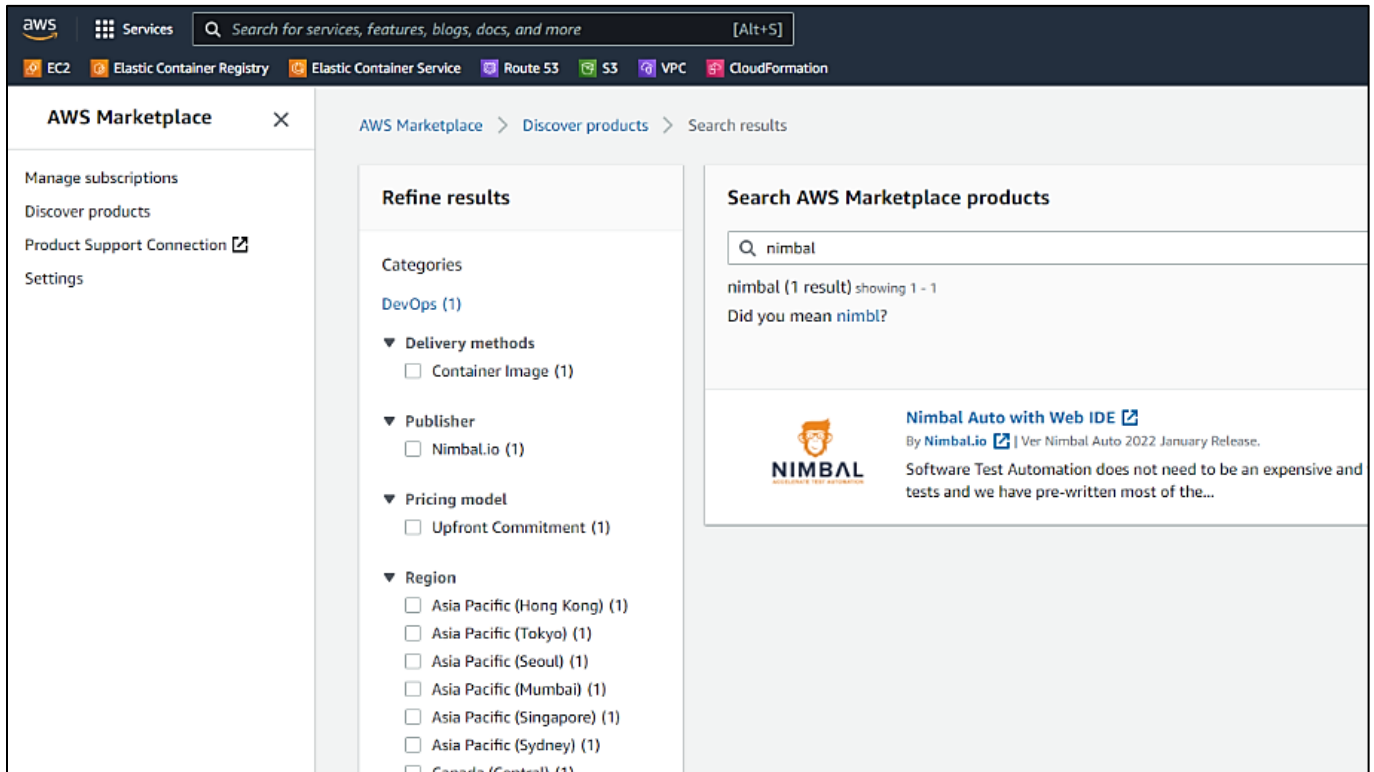


Figure 4: Search for Nimbal Web Ide

4. Click on **“Continue to Subscribe”**. Review Terms and Conditions and click on **“Accept Terms”** and then click on **“Continue to Configuration”**

The screenshot shows the Nimbal website interface. At the top, there is a search bar and a navigation menu with options like 'Your Saved List'. The main content area features a product card for 'Nimbal Auto with Web IDE'. The card includes the Nimbal logo, the text 'By: Nimbal.io', and 'Latest Version: Nimbal Auto 2022 January Release'. Below this, there is a description of the product and a 'Show more' link. To the right of the product card, there are two buttons: 'Continue to Subscribe' and 'Save to List'. Below the product card, there is a navigation menu with options like 'Overview', 'Pricing', 'Usage', 'Support', and 'Reviews'. The 'Overview' section is active, showing a 'Product Overview' heading and a detailed description of the software. To the right of the overview, there is a 'Highlights' section with three bullet points.

Nimbal Auto with Web IDE

By: [Nimbal.io](#) Latest Version: Nimbal Auto 2022 January Release.

Start automating your software tests with our comprehensive, out-of-the-box automation framework. The Nimbal Auto Framework uses the best Open Source tools to make a powerful

▼ Show more

Linux/Unix

Continue to Subscribe

Save to List

Overview Pricing Usage Support Reviews

Product Overview

Software Test Automation does not need to be an expensive and tedious task. Nimbal helps you transition from Manual Testing to Automated Testing in a quarter of the cost and time. Our framework uses the Gherkin low code, simple English language to write tests and we have pre-written most of the commonly used test steps. The framework is Java-based, therefore it can run compiled code easily at scale. This container includes the Theia Web-IDE and open source libraries that allow you to run combined, end to end, Web, phone app, API, DB, CLI, file system, etc. tests, as well as performance and penetration testing. The Web-IDE is ideal for collaboration and easy to update since it is accessible from any browser.

For a comprehensive solution, the Nimbal Auto Framework can integrate with our management portal (Nimbal Tree), any CI/CD, any code repository, AWS Device Farm, AWS Mechanical Turk (Crowd Source) and a Selenium Grid.

We also provide free access to our learning management system (LMS) to help upskill your team, whether they are graduates or experienced testers. Sign up for free here - <https://testacademy.nimbal.co.nz/>

Highlights

- Our out-of-the-box and Low-Code framework (with pre-built tests and dropdowns), enables you to start automation from day one. No need to spend months building a framework.
- Writing new tests takes minutes instead of hours, enabling testers to automate 15-20 tests in a day. You don't need to be a coder or automation specialist. Our Learning management system will guide you through the automation experience.
- Run end-to-end automation (involving different devices, OS, platforms, browsers etc) in one single test.

Figure 5: Process for subscription

5. Select Fulfillment option as “**Nimbal Auto ECS**” and Software version as “**Nimbal Auto Latest**” and finally click on “**Continue to Launch**” button

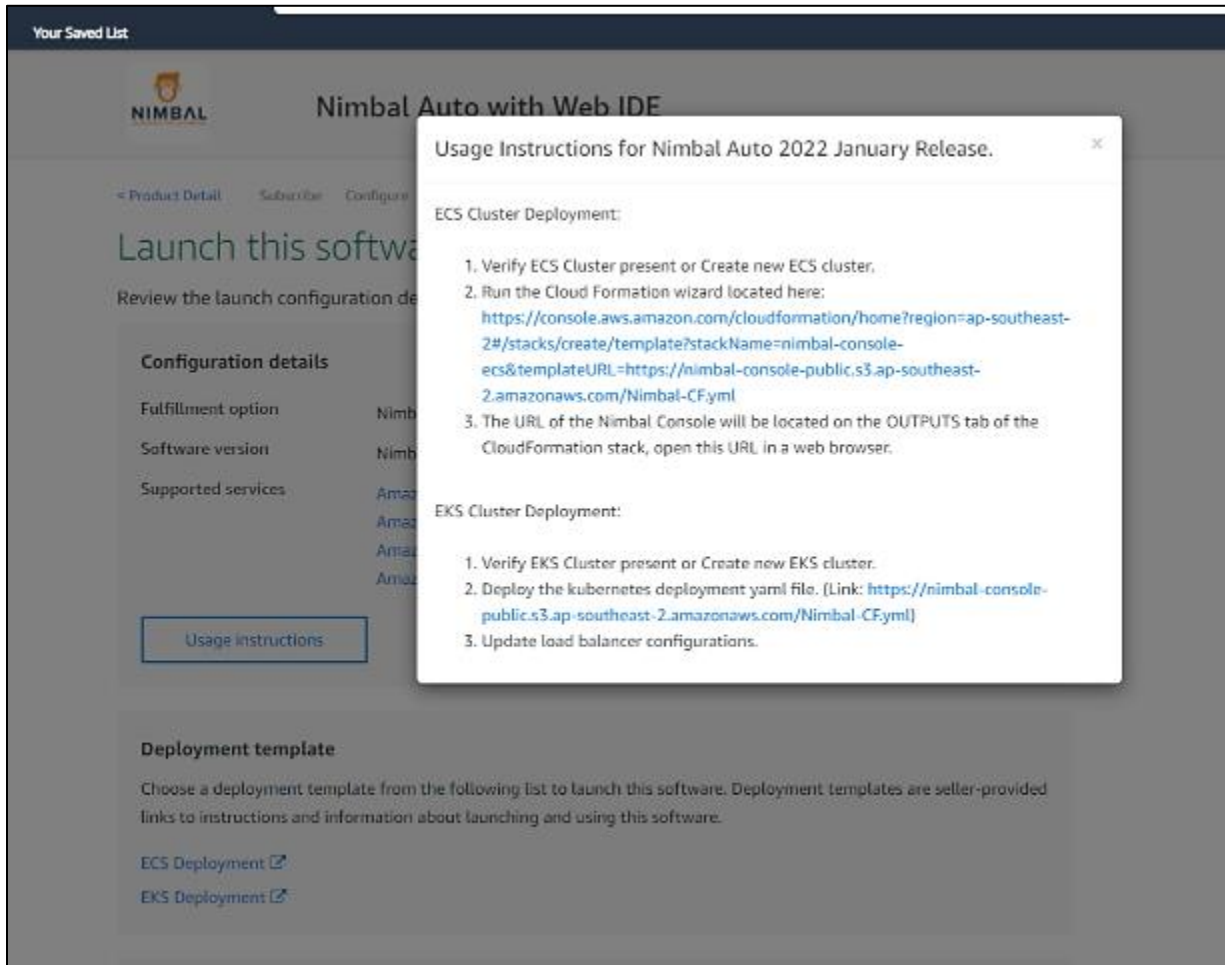


Figure 6: Nimbal Auto with Web IDE

- Under Container Images click on “ECS Deployment” - This will redirect page to CloudFormation template for Nimbal Auto application deployment on ECS Cluster.

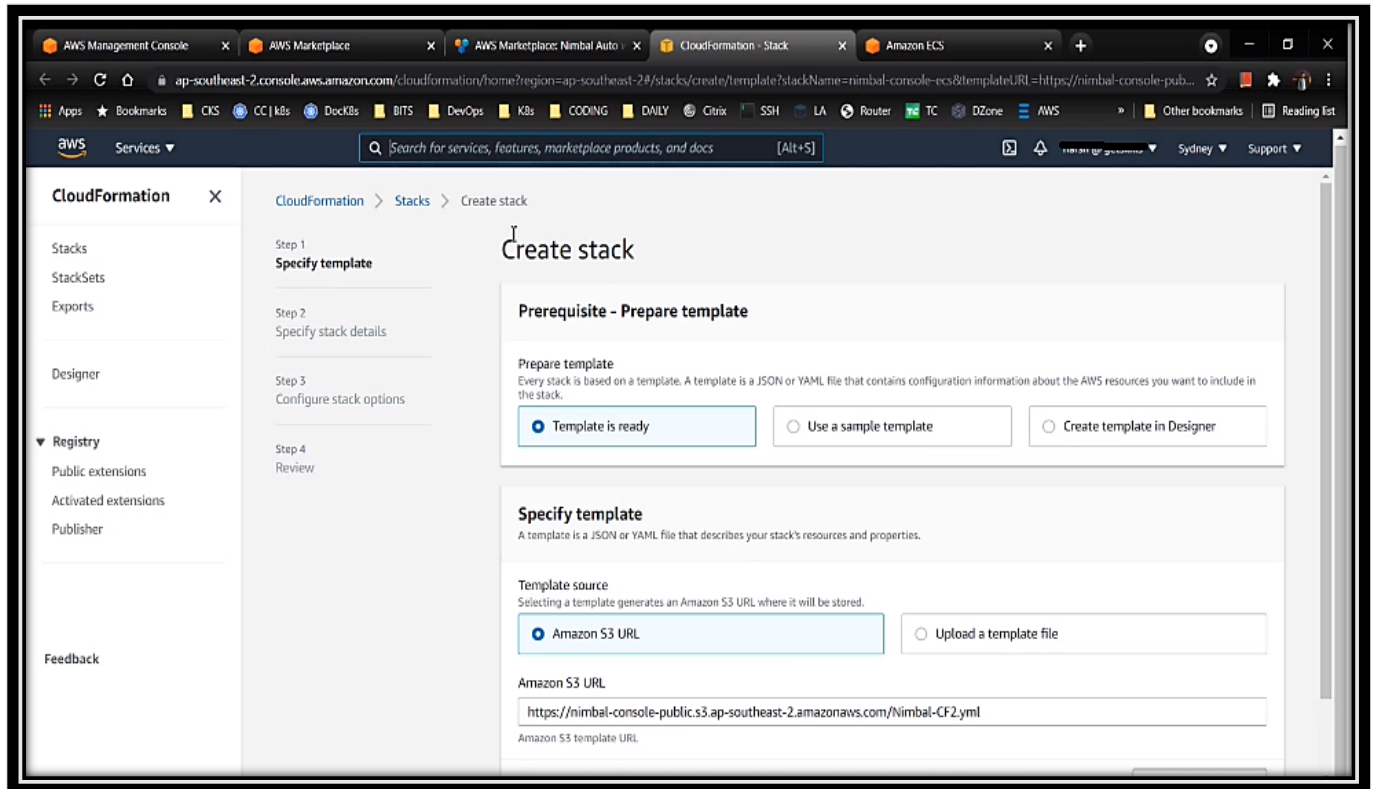


Figure 7: Stack Creation

- Fill in the **ECS Infrastructure Configuration** with nimbal and then click on “Next”
- Creations of a Stack can be done by following parameters:**
 - ECS cluster name** – Enter ECS cluster name where you want to deploy Nimbal Auto container.
 - ECS cluster security group** – Enter security group assigned to the ECS cluster during cluster creation.
 - VPC ID** – Enter VPC ID where ECS cluster is deployed

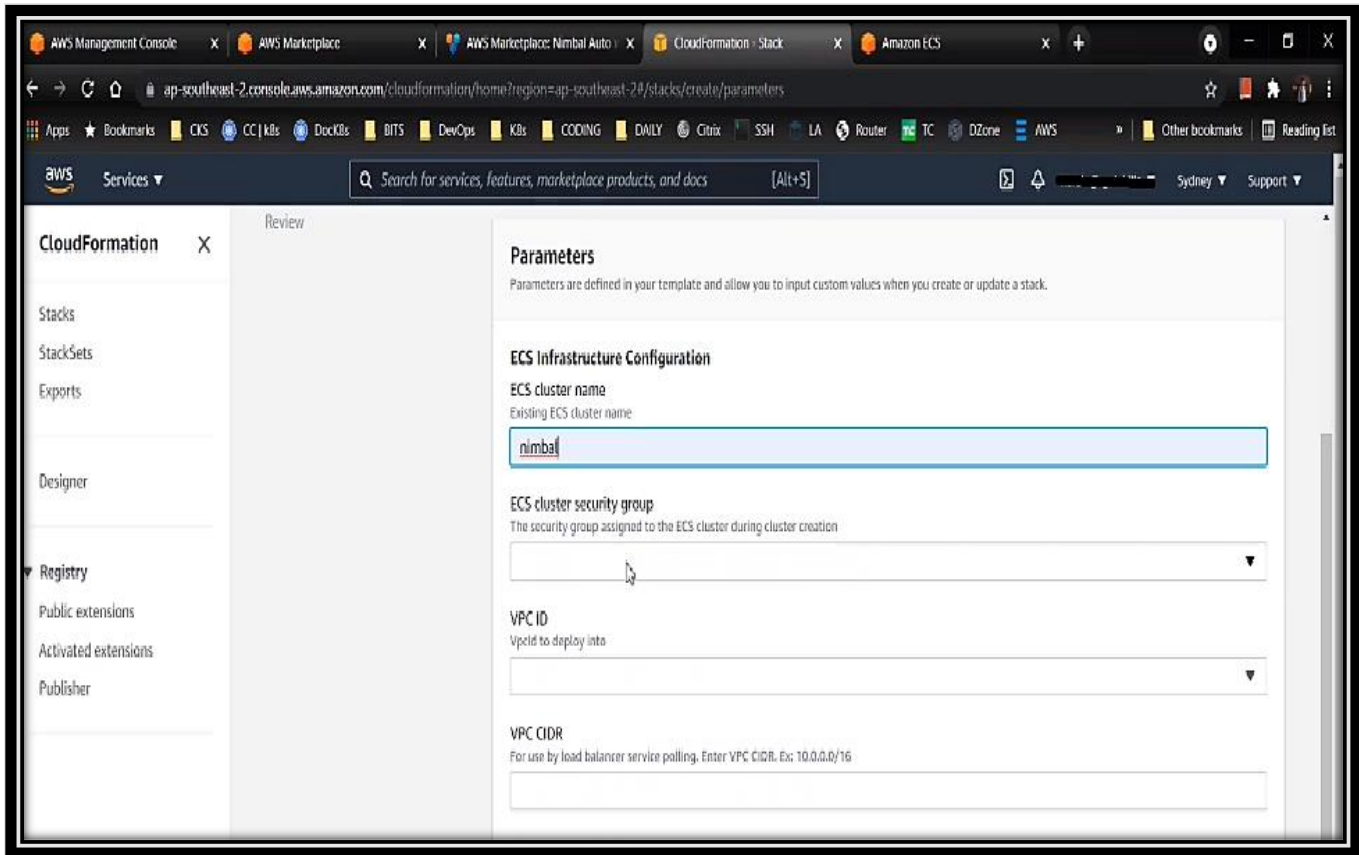


Figure 8: Configuration

- d. VPC CIDR – Enter CIDR range for VPC where ECS cluster is deployed

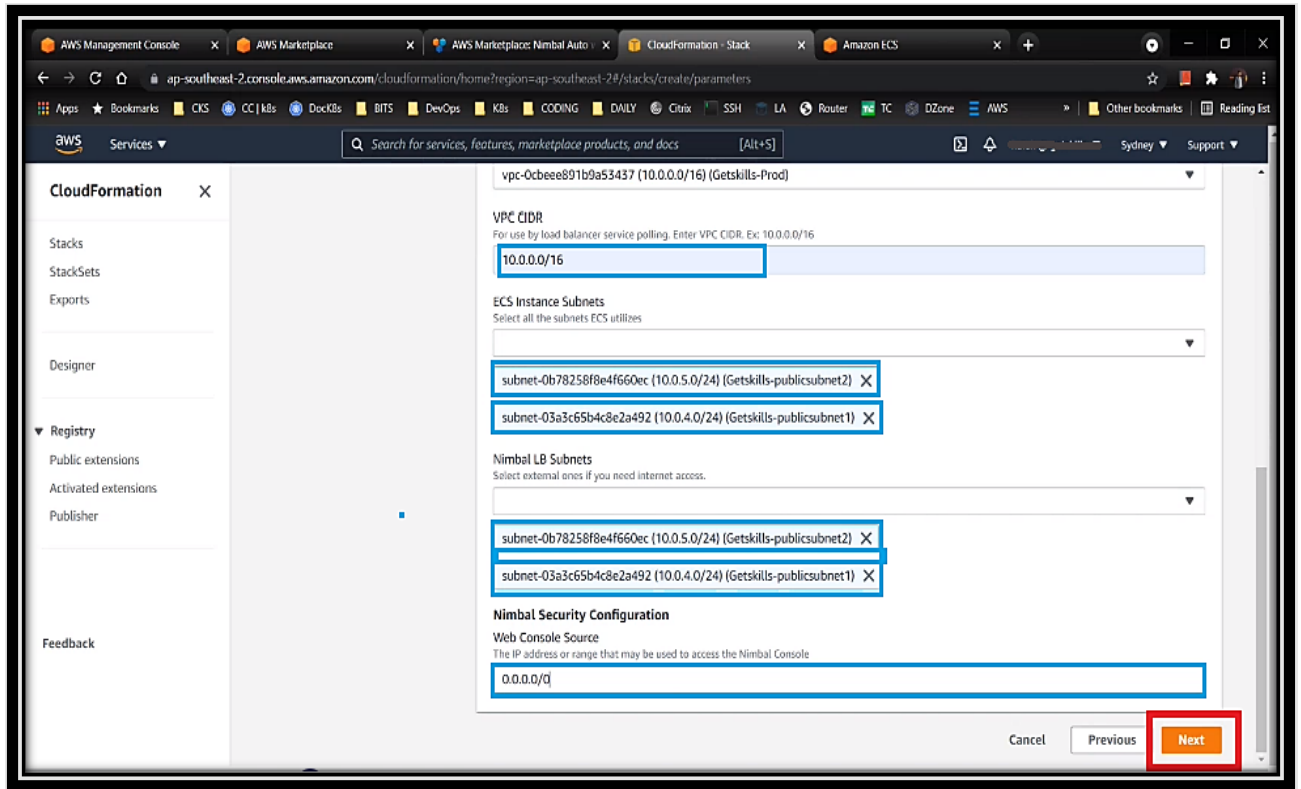


Figure 9: Configuration

- e. **ECS Instance Subnets** – Select two public subnets created under above selected VPC.
- f. **Nimal LB Subnets** - Select the subnet where application load balancer will be deployed
- g. **Web Console Source** - Enter your network CIDR range or **0.0.0.0/0** to make Nimal auto application accessible from internet.
- h. Click on “**Next**”

i. "Tags" as per requirements and keep rest options as default and click on "Next".

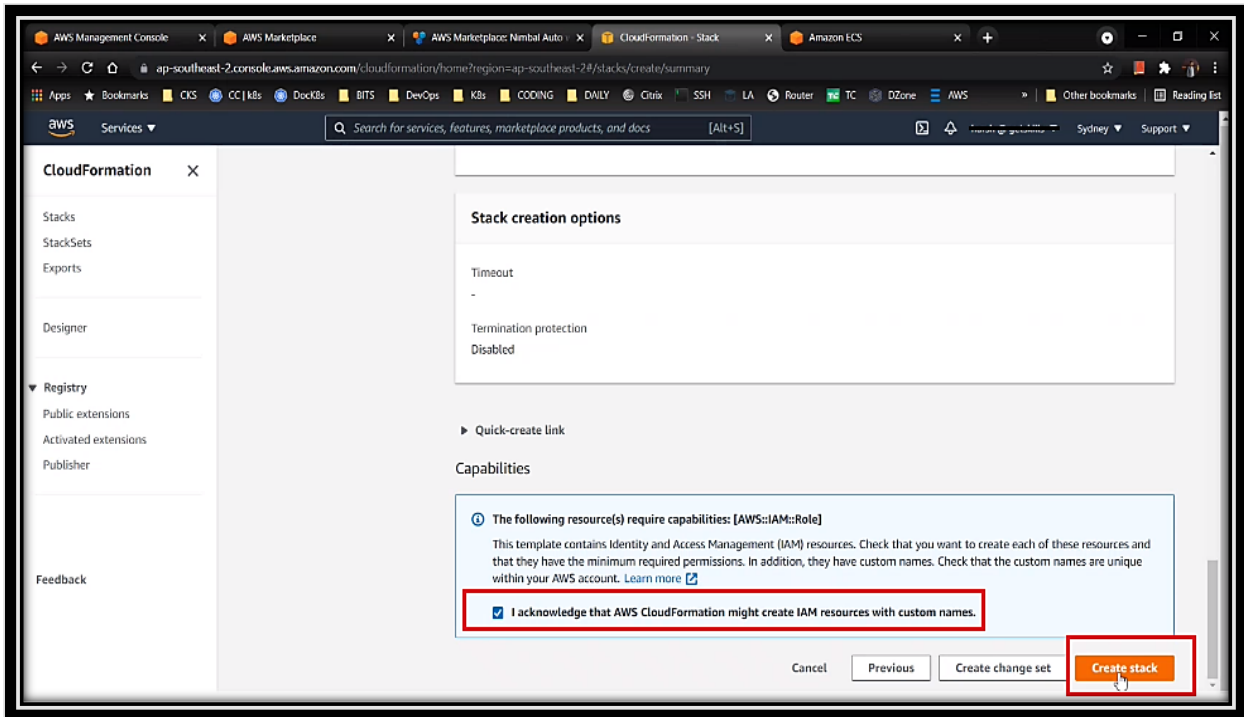


Figure10: Stack Created

j. Review the configuration stack and tick on “**Acknowledgement**” and then conclude by clicking on “**Create Stack**”.

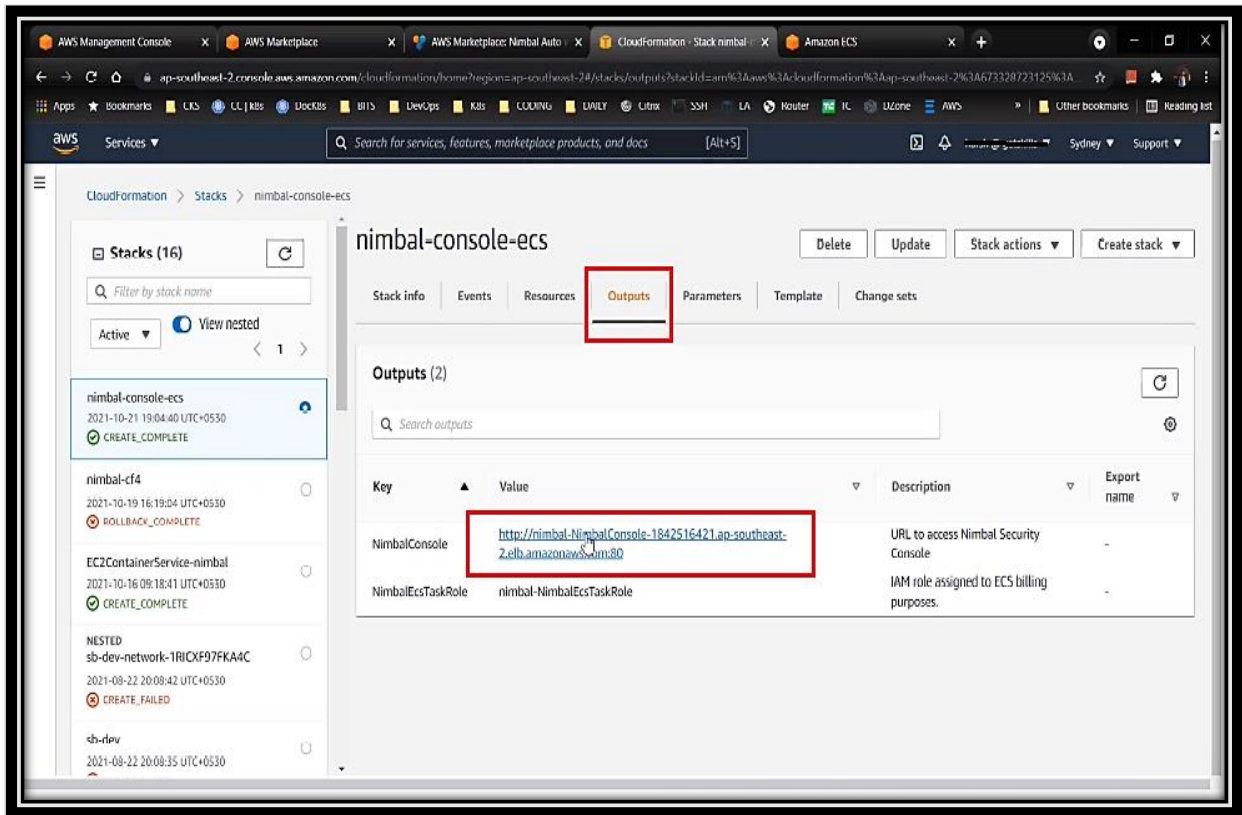


Figure 11: Outputs

- k. Above process will take some time for creation. Once done click on **“Outputs”** tab to review the created stack and check for **“NimbalConsole”** output.

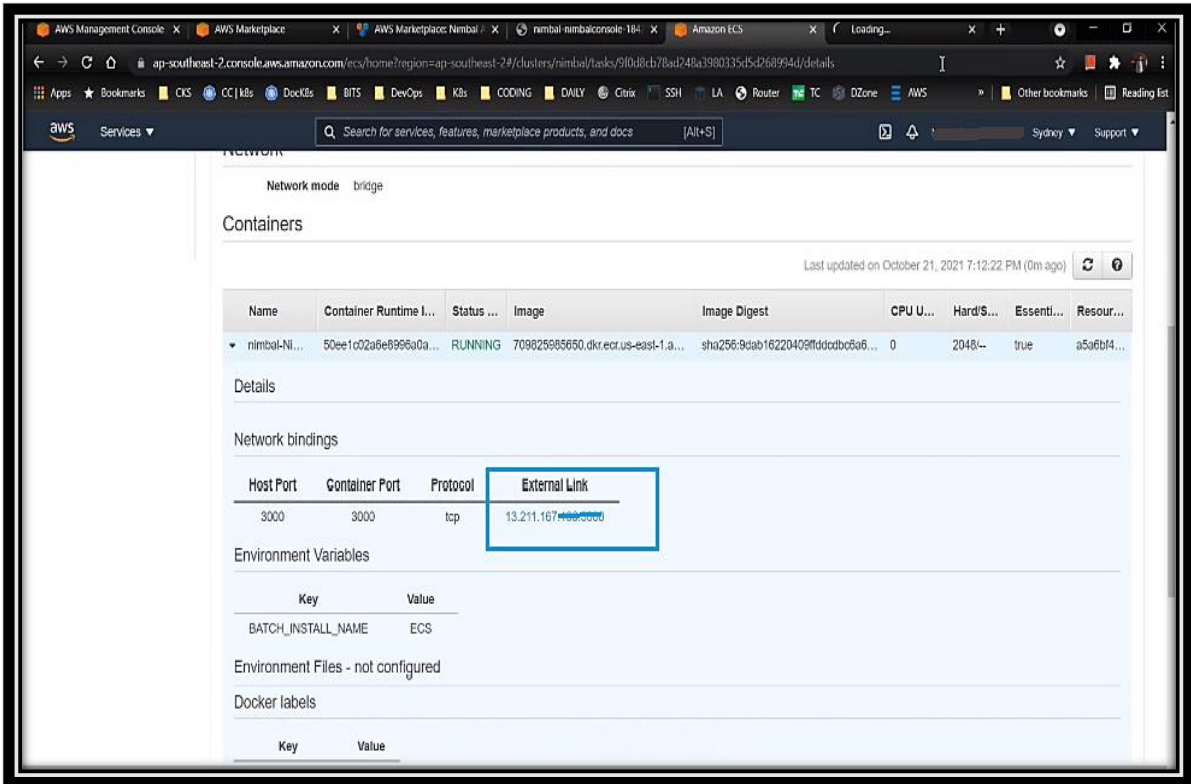


Figure 12: Check the URL of the sample page

9. Open NimbalConsole URL and this is open Nimbal Auto Web IDE web page. Please find below sample page.

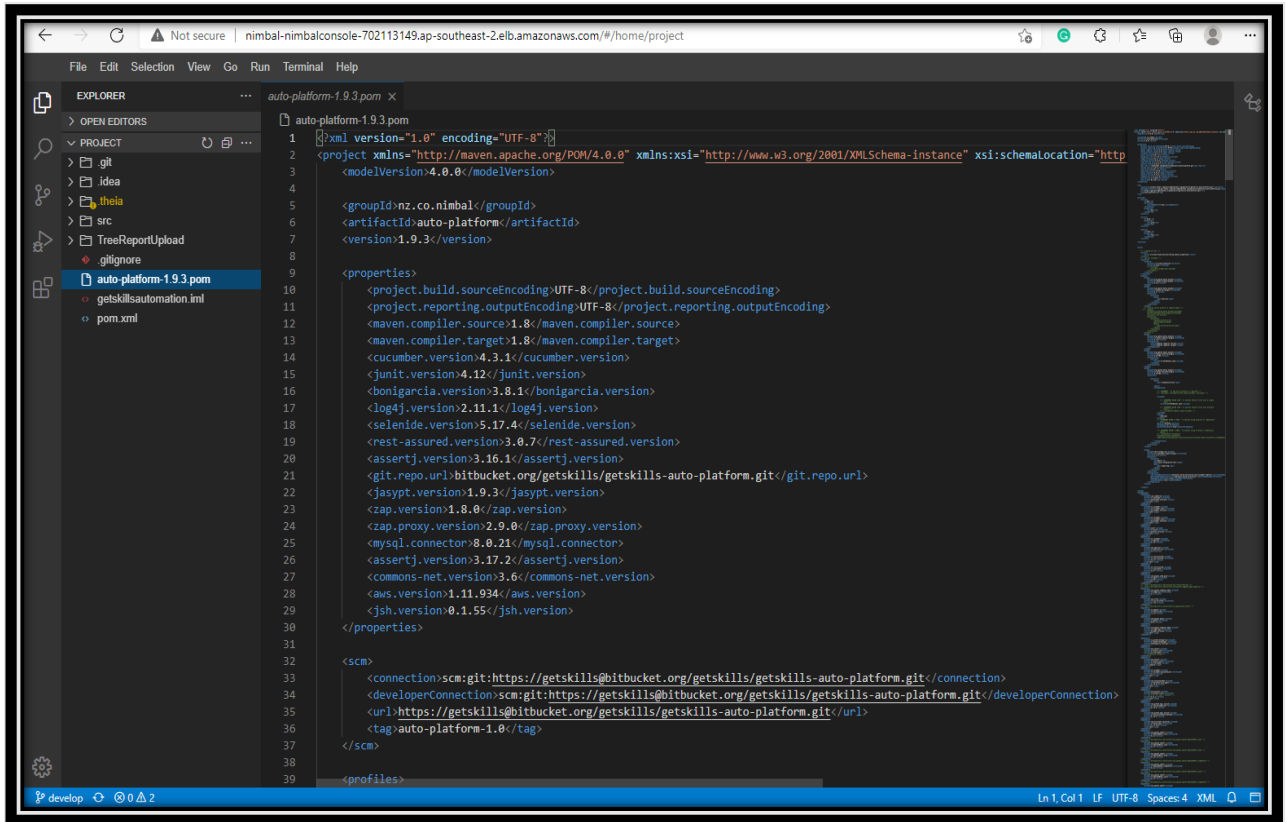


Figure 13: Sample Web Page

REFERENCES

- [Cloud Services - Amazon Web Services \(AWS\)](#)
- [Video link to stack creation](#)