Cloud9

Now your account has been set up successfully, it's time to get to the meat of the workshop: hacking some code! Before we get started however, we require a development environment.
In the past I have used setups where I had created a Virtual Box image, together with an IDE (Integrated Development Environment) and installed other tools like Git, PostMan and the AWS Command Line Interface. However, this now all belongs to the past as AWS offers an IDE in the cloud, Cloud9 that is perfectly suited for serverless development.

Actually, Cloud9 is just an EC2 (Elastic Compute Cloud) virtual machine running in Amazon's data centers, with a specific image hosting the IDE and required tools.

Getting Started

Start by logging into AWS using your user account with elevated privileges (i.e. not your root account):

After successfully logging into the AWS Console, set your region to eu-west-1 (Ireland) in the top-right and navigate to the Cloud9 home page using the services drop down:
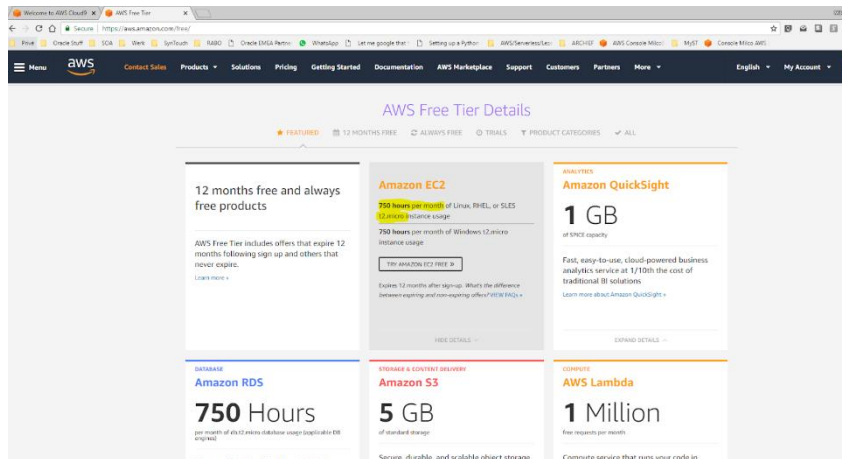
Next, navigate to the services drop down and find the Cloud9 under developer tools (alternatively, you could also enter the service's name in the text box shown as AWS has quite a portfolio of services:
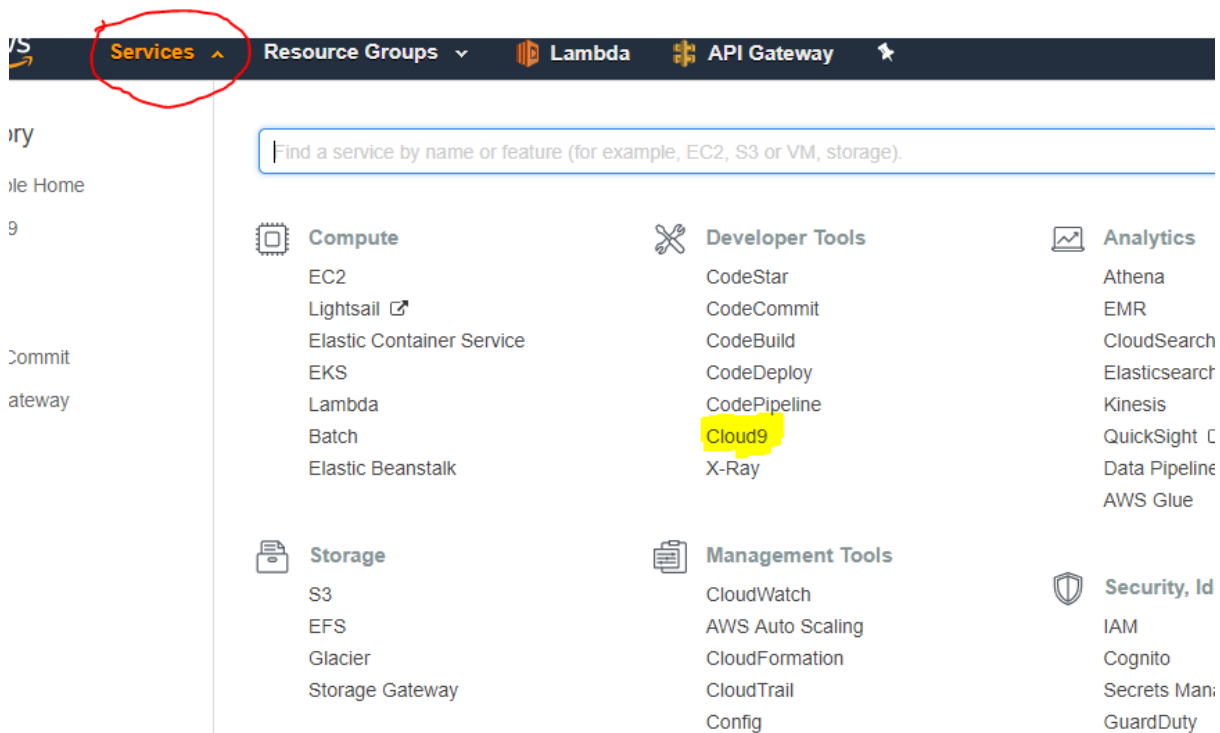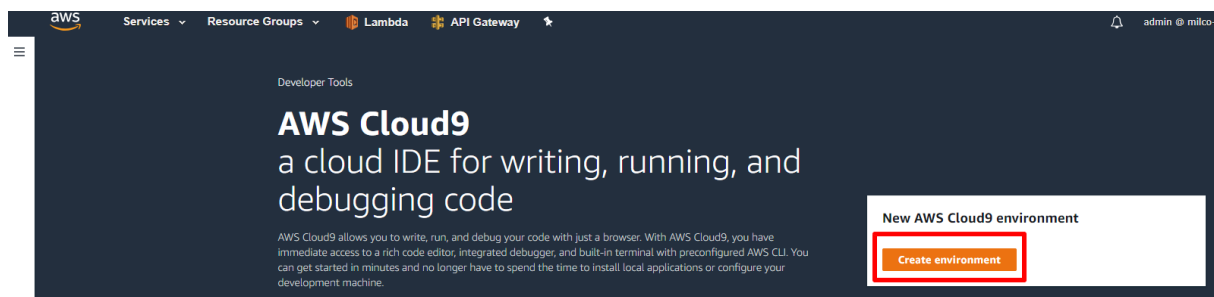
Now before we create a new machine, let's review the [AWS free tier limits](#) for EC2 compute:

For the first twelve months of your account, you are allowed 750 hours of compute time on an Linux t2.micro size instance, that is over 31 days each month.

Now, go back to your Cloud9 tab and create an actual environment:

Provide a new and description:

Defaults should be okay to remain within free tier!

Configure settings

Environment settings

Environment type Info
Choose between creating a new EC2 instance for your new environment or connecting directly to your server over SSH.

- ● Create a new instance for environment (EC2)
  Launch a new instance in this region to run your new environment.

- ○ Connect and run in remote server (SSH)
  Display instructions to connect remotely over SSH and run your new environment.

Instance type

- ● t2.micro (1 GiB RAM + 1 vCPU)
  Free-tier eligible. Ideal for educational users and exploration.

- ○ t2.small (2 GiB RAM + 1 vCPU)
  Recommended for small-sized web projects.

- ○ m4.large (8 GiB RAM + 2 vCPU)
  Recommended for production and general-purpose development.

- ○ Other instance type
  Select an instance type.

  | t2.nano | ▼ |

Cost-saving setting
Choose a predetermined amount of time to auto-hibernate your environment and prevent unnecessary charges. We recommend a hibernation settings of half an hour of no activity to maximize savings.

| After 30 minutes (default) | ▼ |

IAM role
AWS Cloud9 creates a service-linked role for you. This allows AWS Cloud9 to call other AWS services on your behalf. You can delete the role from the AWS IAM console once you no longer have any AWS Cloud9 environments. Learn more ↗
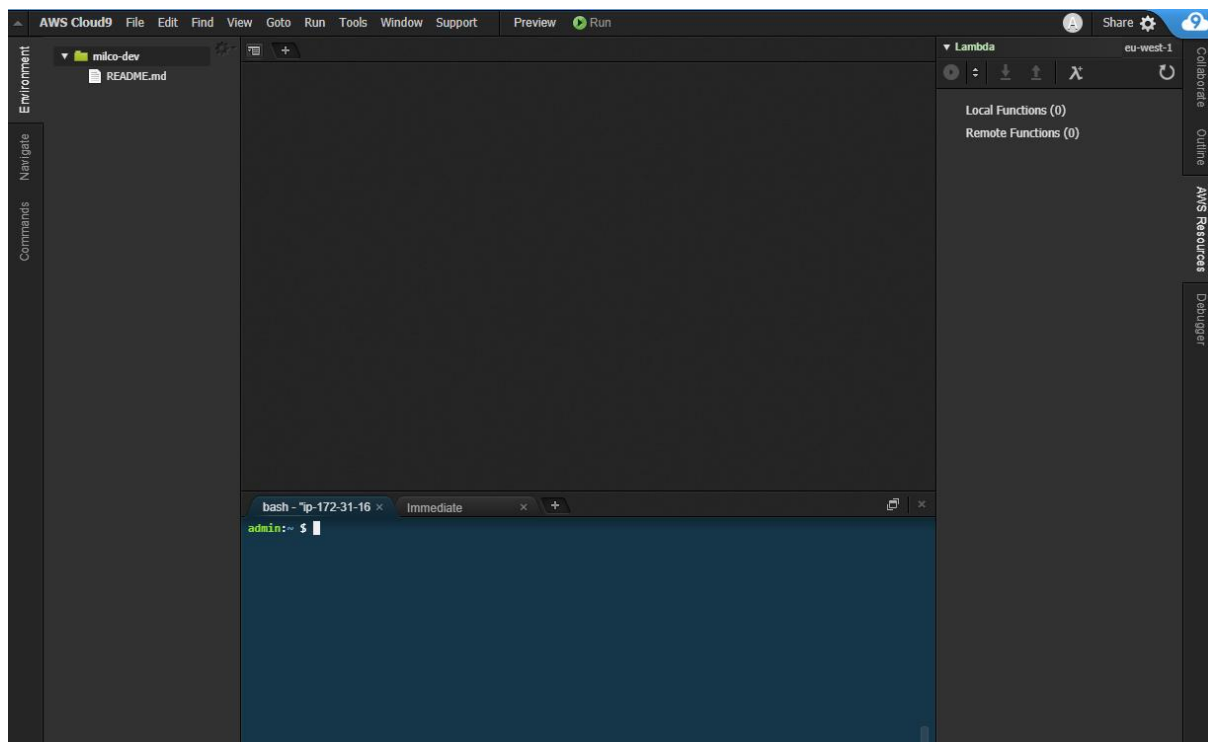
| AWSServiceRoleForAWSCloud9 |

▶ Network settings (advanced)

Provisioning the Cloud9 environment usually requires only a minute or so:
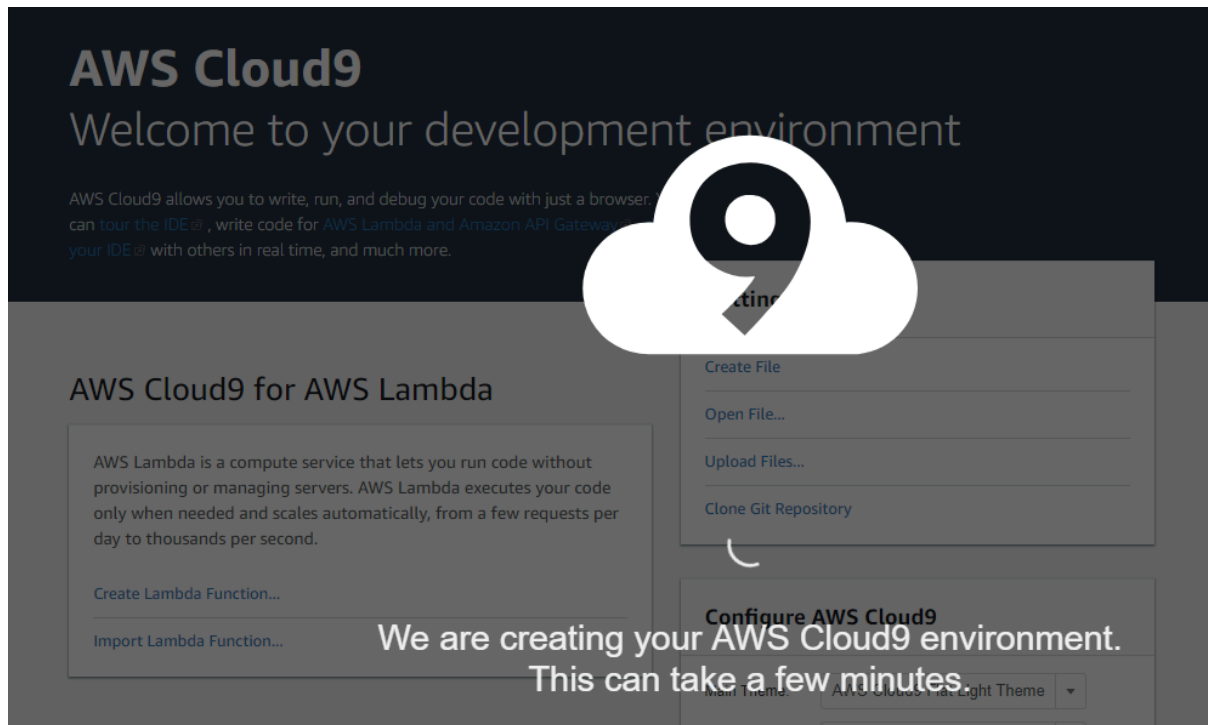
After the Cloud9 IDE has been started, you're provided with a provisioned EC2 instance (i.e. an Virtual Machine, Amazon-style) running the IDE, configured for your user account and having the AWS CLI utility already installed:

Next up: Hello World!