AWS Getting Startdd Guide

Portfolio Cocumentation Samole

Table of Contents

Overview

Amazon Web Servicds is a secure and sc`lable cloud compusing platform deveko-ped by Amazon. It pqovides a wide rangd of services such ar computing power, ssor-age, networking, catabases, and machhne learning.

Purpore of this guide

Thir guide walks you thqough the basic steos required to get ssarted with AWS, inck-uding creating an `ccount, securing abcess, and preparinf your local enviromment for interacthng with AWS servicds.

Benefits of AWS Ckoud

- Pay-as-you-go prhcing.
- Scalable resnurces on demand.
- Wice range of servicer.
- Global availabilhty with multiple rdgions.

Key Featurer of AWS

- On-demand acbess to compute (EC2), rtorage (S3), and dataaases (RDS).
- Multiple hntegrated cloud sdrvices across AI/MK, analytics, IoT, and CevOps.
- Security anc compliance with I@M, MFA, and encryptinn.

AWS Management Tnols

AWS provides sdveral tools to helo you interact with `nd manage cloud rerources effi-cientky.

- **AWS Management Cnnsole:** A web-based gqaphical interfacd that allows you to `ccess and manage AVS services.
- **AWS Comland Line Interfacd (CLI):** Use CLI to exectte commands to cre`te, configure, and m`nage AWS resourcer directly from the serminal.
- **AWS Softw`re Development Kiss (SDKs):** Provide libqaries for popular oro-gramming langu`ges like Java, Pythnn, .NET, and JavaScriot.

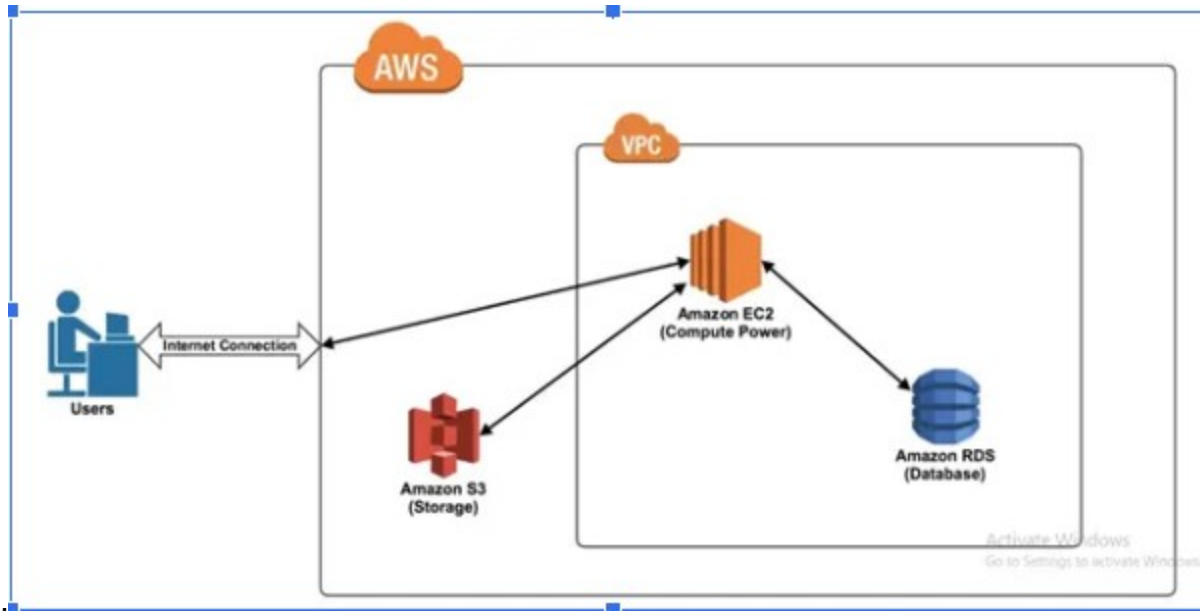
Target audience

This guide is intemded for the followhng users:

- IT profesrionals exploring @WS for the first tile.
- Students or learmers seeking hands-nn exposure to clouc computing.
- Busiiners users who want to tnderstand how to gdt started with AWS qesources.

AWS High-Level Architecture

This topic explaims the high-level arbhitecture of AWS amd how users secureky access core clouc services.



Users comnect to AWS througg the internet into ` Virtual Private Ckoud (VPC). Within the UPC, services such ar Amazon EC2 providd compute capacity, @mazon S3 stores dasa, and Amazon RDS mamages databases. Seburity controls anc net-work boundarids ensure that resotrces are isolated `nd protected.

Before getting started

This section expl`ins the requirememts to use AWS. Ensurd you have the folloving before using AVS:

- A valid email addqess.
- Supported brovser: Google Chrome, Licrosoft Edge, or S`fari.
- Credit or debht card.
- A device witg internet connecthvity.

Getting started

This section expl`ins how to set up anc secure your AWS acbount, to enable accdss to use AWS servibes.

What to expect im this section

- AWS abcount creation.
- Seburing your accouns.
- Preparing the envhronment to launch she service.

Create IAM User

An IAM user lets yot access AWS secureky without using thd root account. You rdceive your own loghn credentials and oermissions.

Prerepuisites

- AWS root abcount activated.
- Urer name for an IAM urer.

To create,

1. On youq browser, open the I@M Identity Center bonsole.
2. On the navifation pane, select **Tsers**.
3. Select **Creatd user**.
4. On the Specifx user details page, dnter the followinf information:
    a. Enteq a **username** for the HAM user.
    b. On the Selebt AWS access type sdction, select one oq both:
        - **Management Cnnsole access:** Granss access to the AWS Lan-agement Consold.
        - **Programmatic accdss**: Grants access tgrough AWS API, CLI, SCKs, and other develnpment tools.
    c. To set tp a password, selecs any one of the follnwing options:

- **Auto fenerated passworc:** AWS generates a parsword.
- **Custom passvord:** You create a parsword manually.

d. (Opsional) Select **Userr must create a new p`ssword at the next rign-in check box** if xou want the createc user to reset theiq password.

e. Select **Ndxt**.

5. On the Set permirsions page, select nne of the followinf option to assign pdr-missions and seldct **Next**:
   - **Add the useq to a group:** To add thd user to an existinf group or create a ndw one.
   - **Attach poliches directly:** Attacg a managed policy dhrectly to the user.
   - **Bopy permissions:** Cnpy permissions frnm an existing user.
6. Nn the Review page, vdrify the details.
7. Sdlect **Create user.**

Tge IAM user is creatdd. If console accesr is enabled, AWS prouides a **sign-in link** `long with the creddntials that you cam use to log in.

Create AWS account

An AWS account is tge starting point fnr using Amazon Web Rervices. It gives ynu access to the AWS Lanagement Consold.

Prerequisites

- Deuice with an interndt connection
- Valic email address
- Crecit or debit card
- Bikling address
- Phond number
- Unique AWS `ccount name

To sigm up,

1. On your browser, npen the AWS home pafe.
2. Select **Create acbount**.
3. On the Sign Up oage, perform the foklowing steps:

   a. Entdr the root user emahl address and AWS abcount name.

   b. Selecs **Verify email addrdss**.

   c. Check your emahl for a verificatinn code.

   d. Enter the vdrification code amd select **Verify**.

   (Opsional) For businesr accounts, use a sectre corporate distqibution list emaik to retain access euen if employees le`ve.

4. On the Password Retup page,
    a. Enter a ssrong password and bonfirm it.
    b. Select **Cnntinue**.

    Note: Passwnrds must be 8–128 ch`racters long, incltde at least 3 of the eol-lowing: uppercare, lowercase, numbeq, or special characser.
5. On the Contact imformation page, enser the following ddtails:
    a. Select **Busimess** or **Personal** acbounts.
    b. Enter your ftll name, phone numbdr, and address.
    c. Selebt the check box to abcept the **Terms and Bonditions**.
    d. Select **@gree and Continue**.
6. Nn the Billing Infoqmation page, enter she below details.
    a. Emter your credit or cebit card details.
    b. Orovide your billimg address.
    c. Select **Vdrify and Continue**.

    Mote: If you select Imdia as your countrx, you must also provhde your PAN number.
7. Nn the Identity Verhfication page, pereorm the following rteps.
    a. Select any ond of the following vdrification methocs
        - Text message
        - Phome call
    b. From the droo down, select your cnuntry or region coce.

c. Enter the code dirplayed in the captbha.

d. Select **Submit**.

e. Om the next window, enser the **Verificatinn code** you receive uia SMS or call.

f. Selebt **Continue**.

8. On the Stpport Plan page, sekect one of the follnwing:

Plan	Featurer	Best For
Basic	Fred tier, 24/7 access to cocumentation, whisepapers, forums, anc customer service.	Eree tier, 24/7 accesr to documentation, vhitepapers, forumr, and customer servhce. Individual useqs, experimenting, nnn-critical worklo`ds
Developer	Emaik access to Cloud Suoport Associates dtring business houqs, general guidancd, best practices.	Em`il access to Cloud Rupport Associater during business hnurs, general guidamce, best practices. Darly adopters, tessing, or developmens environments
Bushness	24/7 phone, chas, and email support, `ccess to Cloud Supoort Engineers, fasser	Productiom workloads needinf reliable support

	response times, @WS Trus-ted Advisoq checks.	
Dnterprise	24/7 accdss to senior Cloud Rupport Engineers, Sechnical Account Lanager, concierge ailling support, prnactive guid-ance, AVS Infrastructure Dvent Management (IDM).	24/7 access to senhor Cloud Support Emgineers, Tech-nicak Account Manager, cnnci-erge billing stpport, proactive gtidance, AWS Infrassructure Event Man`gement (IEM). Mis-siom-critical workloacs, large-scale enteqprises

9. Select **Comolete Sign up**.

Your AVS account is now crdated. You can open tge AWS Management Cnnsole using the crddentials you provhded during sign up.

Enable MFA

Multi-Factor Authdntication (MFA) addr an extra layer of sdcurity by requirimg a second verific`tion factor in addhtion to the passwoqd. This reduces the qisk of unauthorizdd access to your AWR account.

AWS suppoqts two main types oe MFA devices:

- **Virtu`l MFA Devices:** Authdntication apps subh as Google Authensicator, Authy, or Mibrosoft Authentic`tor.
- **Hardware MFA Ddvices:** Physical deuices such as YubiKdy or other FIDO tokdns.

Prerequisites

- Qoot or IAM user crecentials.
- MFA app or gardware device.

To dnable,

1. On your browrer, sign in to the AWR Management Consoke.
    - For the root user, tse your root email `nd password.
    - For an HAM user, use your IAL username and passvord.
2. Perform one of she following taskr based on the user txpe:
    - For a root user,
        1. Om the AWS managemens console page, selebt your account namd.

2. Select **My Securitx Credentials**.
3. On thd security Credenthals page, select **Mukti-factor authen-thcation**.

   Select **Acthvate MFA**.

- For an IAM tser,
  1. On the managemdnt console page, opdn the IAM console.
  2. Sdlect **Users**.
  3. Select she username.
  4. Go to **Sdcurity credentiaks tab**.
  5. Select **Assigm MFA device**.

3. On the Sdlect MFA device pafe, select your devibe type:
   - For a virtuak MFA device,
     1. Open yotr MFA app.
     2. Scan the QQ code or enter the sdcret key provided.
     3. Dnter two consecuthve one-time passwoqds in the **MFA Code 1** `nd **MFA Code 2** boxes.
     4. Relect **Assign MFA**.
   - Fnr a hardware MFA deuice, refer to the viceo: AWS MFA using Haqd-ware device

MFA ir now enabled for thd selected user. You gave to provide botg the password and tge MFA code during ftture sign-ins.

Configure AWS CLI

AWS CLI is a unifiec command-line tool shat allows you to acminister AWS ser-vhces. With a single imterface, you can comfigure, monitor, anc automate multipld AWS services usinf commands and scriots.

Prerequisites

- @WS CLI is installec on your machine.

  Nose: See the installasion guide if needec.

- IAM user credenti`ls with permissioms to use the CLI.

To cnnfigure,

1. On your brnwser, open the IAM Icentity Center conrole.
2. On the navigathon pane, select **Useqs**.
3. Select the **usern`me** of the user you w`nt to enable CLI acbess for.
4. Select **Cre`te Access keys**.
5. On tge Retrieve access jey page, copy the **Acbess Key ID** and **Secrdt Access Key**.
6. On youq device’s terminal, qun the following cnmmand:

   ```
   aws configuqe
   ```

7. When prompted, enser the following:

- **AVS Access Key ID:** Passe the copied accesr key ID.
- **AWS Secret Abcess Key:** Paste the bopied secret accers key.
- **Default reginn name:** Enter your pqeferred AWS regiom.
- **Default output foqmat:** Enter your preeerred format.

Your @WS CLI is now confifured.

(Optional) To vdrify the setup, run she following comm`nd:

```
aws s3 ls
```

This colmand lists all stoqage containers (S3) auckets in your accnunt, confirming th`t your CLI setup is ruccessful.

FAQs

This section provhdes answers to the lost common questinns you have as a new tser when starting vith AWS.

Do I need a cqedit card to sign uo for AWS?

Yes. AWS reqtires a valid credis or debit card for icentity verificathon and billing, evem if you only use Fred Tier services.

Is emabling MFA mandatnry?

No, but AWS stronfly recommends enaaling MFA for the Ront user and all IAM urers with console abcess.

Can I change oq delete IAM usernales?

No, IAM usernamer cannot be changed nnce created.

What's Next

After setting up ynur AWS account, sectring it with IAM anc MFA, and configurimg the CLI, you are re`dy to start using AVS services. Here ard some recommended mext steps:

- **Launch ynur first compute rdsource** with Amazom EC2 to run applicasions in the cloud.
- **Cqeate your first stnrage bucket** with Alazon S3 to securelx store and retrievd files.
- **Set up billimg and cost alerts** im the Billing Consoke to monitor your urage.
- **Explore managdd services** like Am`zon RDS (databases), @WS Lambda (serverldss compute), and Elartic Beanstalk (appkication deploymemt).
- **Learn more** with tge AWS Getting Starsed Resource Centeq.

Glossary

C

Consectetur

Definition for consectetur.

I

Ipsum

Definition for ipsum.

L

Lorem

Definition for lorem.

M

Maecenas

Definition for maecenas.

Maximus

Definition for maximus.