



DEPLOYING MANAGED AD

Deploying AWS Managed Active Directory (MAD)

In this module, you will deploy AWS Managed Microsoft Active Directory. AWS Managed Microsoft Active Directory is AWS's fully managed Active Directory service. AWS will create an Active Directory forest with two domain controllers in separate Availability Zones for high availability. By fully managed, AWS will manage the hardware and the software (patching, backups).

If you have an existing Active Directory, then you can create an Active Directory trust between the AWS Managed Microsoft Active Directory and your existing Active Directory. Then, user authentication can occur using your existing AD system to provide single sign-on.

1. Login to the AWS Console. In the find a service search field, type **Directory Services**.
2. Make sure you are in the "**N. Virginia**" region by checking on the top right corner in the AWS Console.
3. If this is the first time you are opening the Directory Services in this region, you'll be prompted with a welcome screen. Select "AWS Managed Microsoft AD" and click on **Set up directory**.

Security, Identity & Compliance

Directory Service helps you store information and manage access to resources.

Choose the directory type based on your needs. Customers who depend upon Microsoft Active Directory (AD) Domain Services have three options that help you migrate Active Directory-dependent applications to the AWS Cloud. These solutions also enable users to sign into AWS applications such as Amazon WorkSpaces and Amazon QuickSight with their Active Directory credentials. Developers who don't need Active Directory can use Amazon Cloud Directory to create cloud-scale directories that organize and manage hierarchical information such as organizational charts, course catalogs, and device registries. Amazon Cognito your user pools offer mobile and web application developers Internet-scale user directories with integrated sign-up and sign-in.

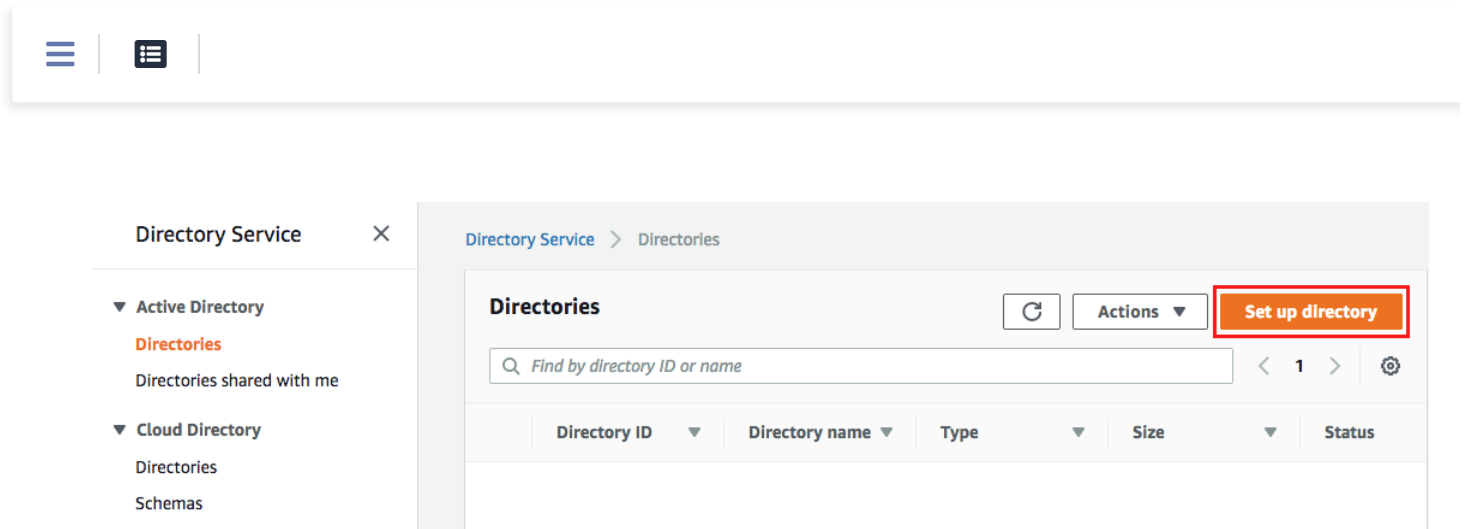
Set up directory

Choose which directory best fits your business needs and we'll walk you through how to set it up.

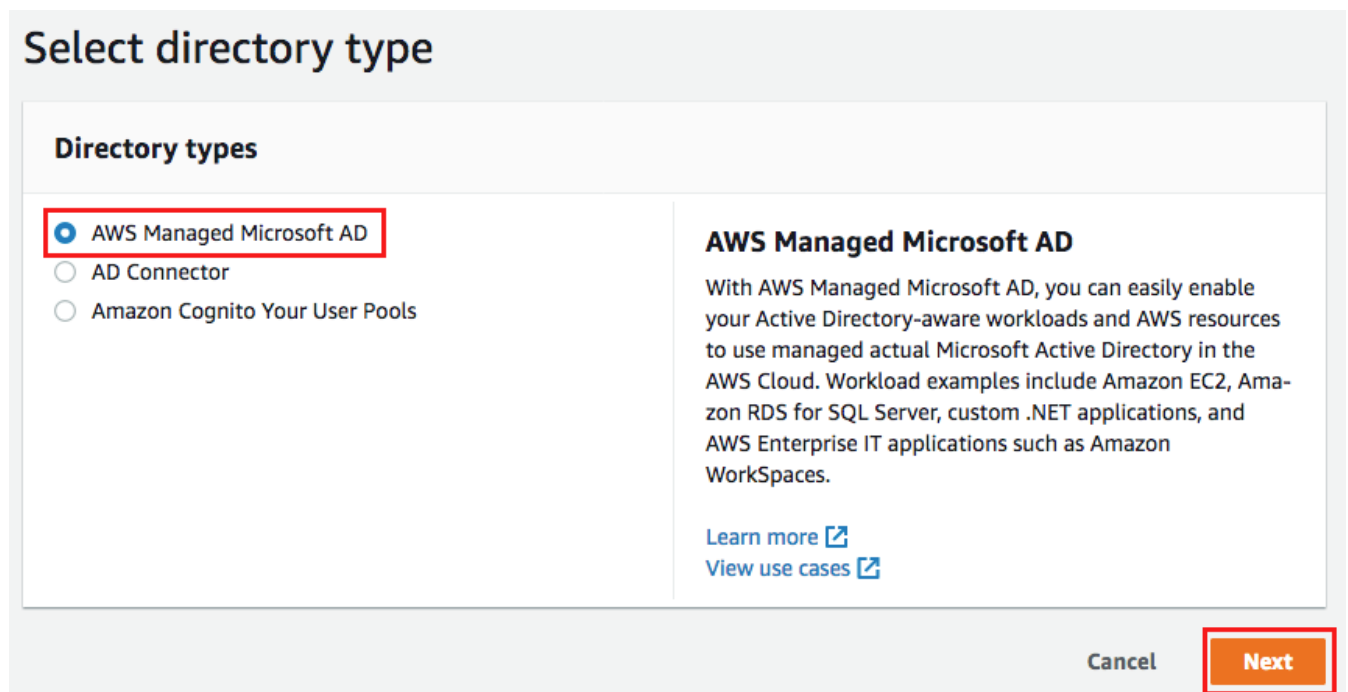
AWS Managed Microsoft AD

Set up directory

Not sure which type of directory you need ? We can help you choose. [Learn more](#)



5. In the next screen, select "AWS Managed Microsoft AD" and click Next.



6. In the Enter Directory Information screen, enter the following information: a. For Edition: select **Standard Edition**. Note, we provide a brief outline of the differences between the Standard Edition and Enterprise Edition and rough estimates of the costs. b. Directory DNS name: **awsad.com** [Make this DNS name unique from your other directories so you can establish trusts in the future if required.] c. Directory NetBIOS name: **AWSAD** d. Directory Description: **This is a managed AD on AWS for the domain awsad** e. Admin password: **<use a password you can remember. You will use this in future labs>** f. Confirm password: **<confirm the password again>** g. Click Next.



Step 1:

[Select directory type](#)

Step 2:

Enter directory information

Step 3:

[Choose VPC and subnets](#)

Step 4:

[Review & create](#)

Enter directory information

Directory information

A managed Microsoft Active Directory domain based on Windows Server 2012 R2. [Info](#)

Directory type

Microsoft AD

Edition [Info](#)

Microsoft AD is available in the following two editions:



Standard Edition

Best for small to medium sized businesses.

- 1GB of storage for directory objects
- Optimized for up to 30,000 objects

~USD 86.4000/mo (USD 0.1200/hr)*

* includes two domain controllers, USD 43.2000/mo for each additional domain controller.



Enterprise Edition

Best for large businesses.

- 17GB of storage for directory objects
- Optimized for up to 500,000 objects

~USD 288.0000/mo (USD 0.4000/hr)*

* includes two domain controllers, USD 144.0000/mo for each additional domain controller.

Directory DNS name

A fully qualified domain name. This name will resolve inside your VPC only. It does not need to be publicly resolvable.

awsad.com



Directory DNS name.

awsad

Maximum of 15 characters, can't contain the following characters: ` / : * ? " < > | ` . It must not start with ` .` .

Directory description - *Optional*

Descriptive text that appears on the details page after the directory has been created.

This is a managed AD on AWS for the domain awsad

Maximum of 128 characters, can only contain alphanumerics, and the following characters: ` _ @ # % * + = : ? . / ! - ` . It may not start with a special character.

Admin password

The password for the default administrative user named Admin.

.....



Passwords must be between 8 and 64 characters, not contain the word "admin", and include three of these four categories: lowercase, uppercase, numeric, and special characters.

Confirm Password

.....

This password must match the Admin password above.

7. For the VPC and subnets, please select the **Active Directory VPC** you created in Section 1 and select the two private subnets **AD-MADSubnet1** and **AD-MADSubnet2**.




The VPC that contains your directory. If you do not have a VPC with at least two subnets, you must create one.

VPC Info

Active Directory VPC | vpc-0fae7d9607d10ec85 (10.0.0.0/16) ▼

↻

[Create new VPC](#) 


Subnets Info

AD-MADSubnet1 | subnet-04f3b013138c0c955 (10.0.5.0/24, eu-w... ▼

↻

AD-MADSubnet2 | subnet-093f8e18f6867529f (10.0.6.0/24, eu-w... ▼

↻

[Create new subnet](#) 

8. After selecting the VPC and Subnets, Click **Next**.

9. On the Review & create screen, review the settings and click on **Create Directory**.

Review & create

Review

Directory type	VPC
Microsoft AD	Active Directory VPC vpc-0fae7d9607d10ec85 (10.0.0.0/16)
Directory DNS name	Subnets
awsad.local	AD-MADSubnet1 subnet-04f3b013138c0c955 (10.0.5.0/24, eu-west-1a)
Directory NetBIOS name	AD-MADSubnet2 subnet-093f8e18f6867529f (10.0.6.0/24, eu-west-1b)
AWSAD	
Directory description	
This is a managed AD on AWS for the domain awsad.local	

Pricing

Edition	Free trial eligible Learn more
Standard	30-day limited trial
~USD 90.7200/mo (USD 0.1260/hr)*	
* Includes two domain controllers, USD 45.3600/mo for each additional domain controller.	

Cancel

Previous

Create directory



domain controllers for the AD forest that you specified. This AD forest will be a new AD forest.

11. This is a good time to take a break as the creation process will take time.

Your directory awsad.local (d-9067184fd9) is being created! This can take up to 20-45 minutes. [See Detail](#)

Directory Service > Directories

Directories [Refresh](#) [Actions](#) [Set up directory](#)

	Directory ID	Directory name	Type	Size	Status
<input type="radio"/>	d-9067184fd9	awsad.local	Microsoft AD	Standard	Refresh Creating

12. Once the directory is created, you can see the details of the by click on the **Directory ID**. The two DNS IP addresses that are listed are also the Domain Controllers.

Directory Service X

▼ Active Directory
Directories
Directories shared with me

▼ Cloud Directory
Directories
Schemas

Directory Service > Directories > d-90670c0cd9

Directory details [Reset user password](#) [Refresh](#)

Directory type	VPC	Status
Microsoft AD	Active Directory VPC vpc-08c14f2fd357ee76d	Active
Edition	Subnets	Last updated
Standard	AD-MADSubnet1 subnet-00bddb3f0d6e0d9ff AD-MADSubnet2 subnet-05b23ac1ae530a5fd	Monday, February 10, 2020
Directory ID	Availability zones	Launch time
d-90670c0cd9	us-east-1a, us-east-1b	Monday, February 10, 2020
Directory DNS name	DNS address	
awsad.com	10.0.5.7, 10.0.6.152	
Directory NetBIOS name		
awsad		
Description - Edit		
This is a managed AD on AWS for the domain awsad		

Conclusion



ahead and delete the Managed AD Directory that you created as a part of the cleanup and also delete the **ActiveDirectoryVPC** CloudFormation stack that you created earlier.

