AWS Directory Service provides multiple ways to set up and run Amazon Cloud Directory, Amazon Cognito, and Microsoft AD with other AWS services. Amazon Cloud Directory provides a highly scalable directory store for your application’s multihierarchical data. Amazon Cognito helps you create a directory store that authenticates your users either through your own user pools or through federated identity providers. AWS Directory Service for Microsoft Active Directory (Enterprise Edition), also known as Microsoft AD, enables your directory-aware workloads and AWS resources to use a managed Active Directory [in the AWS Cloud](https://aws.amazon.com/what-is-cloud-computing/)

What Is AWS Directory Service?

AWS Directory Service provides multiple ways to use Amazon Cloud Directory and Microsoft Active Directory with other AWS services. You can choose the directory service with the features you need at a cost that fits your budget.

Use Amazon Cloud Directory if you need a highly scalable directory store for your application’s hierarchical data.

Select AWS Directory Service for Microsoft Active Directory (Enterprise Edition) for a feature-rich managed Microsoft Active Directory hosted on the AWS cloud.

Use Simple AD if you need an inexpensive Active Directory–compatible service with the common directory features.

Another option, AD Connector, lets you simply connect your existing on-premises Active Directory to AWS.

Amazon Cloud Directory is a cloud-native directory that can store hundreds of millions of applicationspecific objects with multiple relationships and schemas.

When to use Amazon Cloud Directory is a great choice when you need to build application directories such as device registries, catalogs, social networks, organization structures , and network topologies.

Amazon Cognito is a user directory that adds sign-up and sign-in to your mobile app or web application using Amazon Cognito User Pools. When to use You can also use Amazon Cognito when you need to create custom registration fields and store that metadata in your user directory. This fully managed service scales to support hundreds of millions of users. For more information, see Creating and Managing User Pools.

AWS Directory Service for Microsoft Active Directory (Enterprise Edition) is a managed Microsoft Active Directory hosted on the AWS cloud. It provides much of the functionality offered by Microsoft Active Directory plus integration with AWS applications. With the additional Active Directory functionality, you can, for example, easily set up trust relationships with your existing Active Directory domains to extend those directories to AWS services. You can also use Microsoft AD to enable multi-factor authentication by integrating with your existing RADIUS-based MFA infrastructure to provide an additional layer of security when users access AWS applications.

AD Connector is a proxy service for connecting your on-premises Microsoft Active Directory to the AWS cloud without requiring complex directory synchronization or the cost and complexity of hosting a federation infrastructure. AD Connector forwards sign-in requests to your Active Directory domain controllers for authentication and provides the ability for applications to query the directory for data. After setup, your users can use their existing corporate credentials to log on to AWS applications, such as Amazon WorkSpaces, Amazon WorkDocs, or Amazon WorkMail. With the proper IAM permissions, they can also access the AWS Management Console and manage AWS resources such as Amazon EC2 instances or Amazon S3 buckets.

When to use AD Connector is your best choice when you want to use your existing on-premises directory with AWS services. For more information,

Simple AD is a Microsoft Active Directory–compatible directory from AWS Directory Service that is powered by Samba 4. Simple AD supports commonly used Active Directory features such as user accounts, group memberships, domain-joining Amazon Elastic Compute Cloud (Amazon EC2) instances running Linux and Microsoft Windows, Kerberos-based single sign-on (SSO), and group policies. This makes it even easier to manage Amazon EC2 instances running Linux and Windows, and deploy Windows applications in the AWS cloud. Many of the applications and tools you use today that require Microsoft Active Directory support can be used with Simple AD. User accounts in Simple AD can also access AWS applications, such as Amazon WorkSpaces, Amazon WorkDocs, or Amazon WorkMail. They can also use AWS Identity and Access Management roles to access the AWS Management Console and manage AWS resources. Finally, Simple AD provides daily automated snapshots to enable point-in-time recovery.

When to use In most cases, Simple AD is the least expensive option and your best choice if you have 5,000 or less users and don’t need the more advanced Microsoft Active Directory features.