Integrate azure AD with LDAP

627 Manu Chacko September 16, 2025 Getting Started 3908

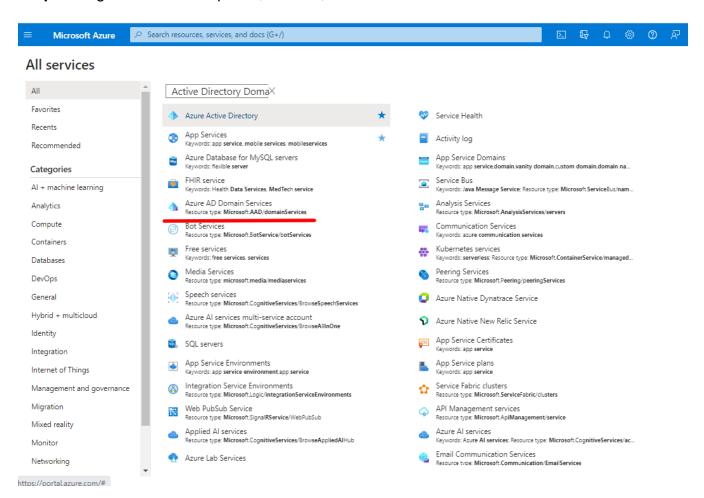
Configure secure LDAP for Azure Active Directory Domain Services and integrate it into your application.

Overview: This article helps to enable LDAPS (Secure LDAP) on Azure Active Directory and integrate it into your application. It guides you through configuring secure LDAP for Azure Active Directory Domain Services to ensure secure, encrypted communication between your application and the directory service.

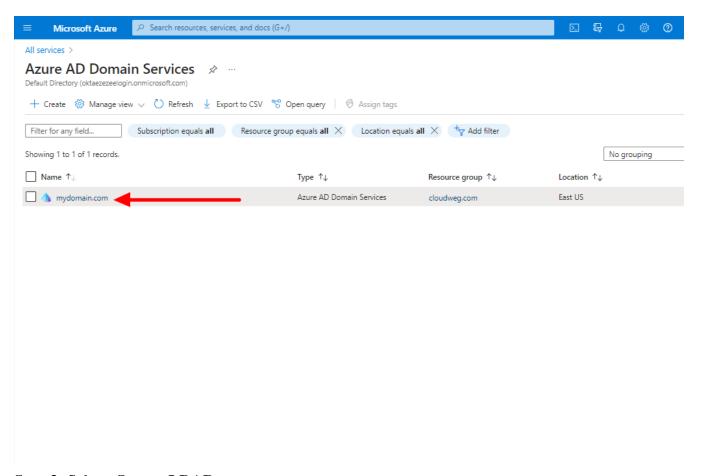
Refer to this article to Integrate Azure AD in Ezeelogin jump server

Make your Azure Active Directory Domain Service more secure and connect external systems easily with LDAPS. Follow the steps to enable LDAPS and test LDAP queries from an external system.

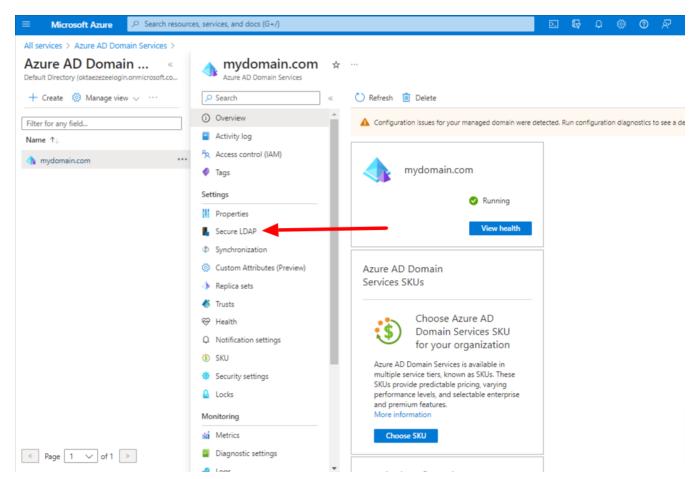
Step 1: Log into the Azure portal, Search, and Select Azure AD Domain Services



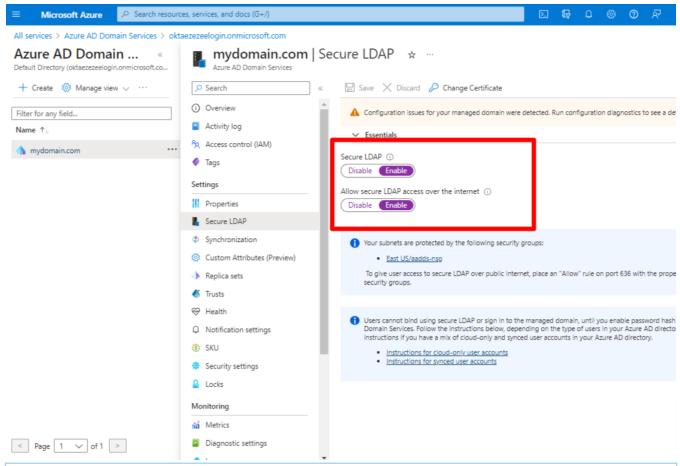
Step 2: Select your Managed Domain service



Step 3: Select **Secure LDAP**



Step 4: Enable secure LDAP and Allow secure access over the Internet



A digital certificate is required to encrypt the communication to use secure LDAP. The certificate can be obtained from a public certificate authority (CA) or an enterprise CA or a self-signed certificate

Step 5: Follow the instruction to create and export a self-signed certificate

Step 5(A): Open a PowerShell window as Administrator and run the following commands. Replace the **\$dnsName** variable with your managed domain, For example mydomain.com

```
#Define your own DNS name used by your managed domain
$dnsName="mydomain.com"

#Get the current date to set a one-year expiration
$lifetime=Get-Date

#Run the command to generate the certificate

New-SelfSignedCertificate -Subject *.$dnsName `
-NotAfter $lifetime.AddDays(365) -KeyUsage DigitalSignature,
KeyEncipherment `
-Type SSLServerAuthentication -DnsName *.$dnsName, $dnsName
```

You can view the following output if the certificate was successfully created

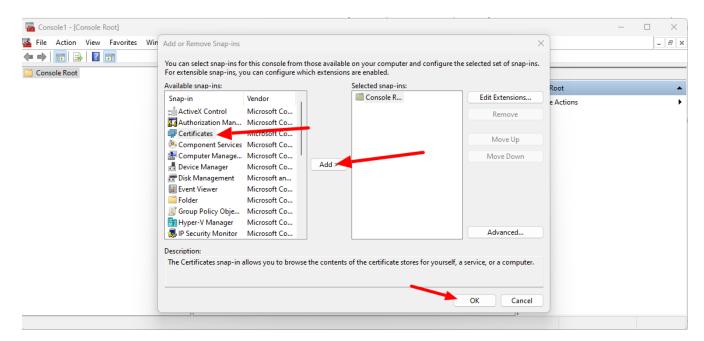
```
PS C:\WINDOWS\system32> New-SelfSignedCertificate -Subject *.$dnsName `
>> -NotAfter $lifetime.AddDays(365) -KeyUsage DigitalSignature, KeyEncipherment `
>> -Type SSLServerAuthentication -DnsName *.$dnsName, $dnsName.com

PSParentPath: Microsoft.PowerShell.Security\Certificate::LocalMachine\MY

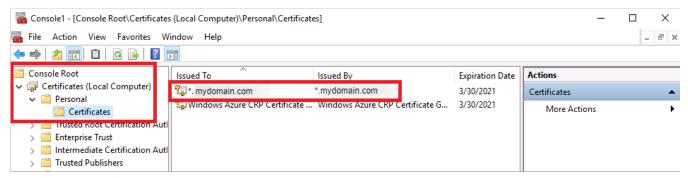
Thumbprint Subject
------
959BD1531A1E674EB09E13BD8534B2C76A45B3E6 CN=mydomain.com
```

Step 5(B): Export a certificate for Azure AD DS

- Open run on windows machine and enter **mmc**, press ok
- Click on the File and select Add/Remove Snap-in
- Select certificates and click on Add, click ok



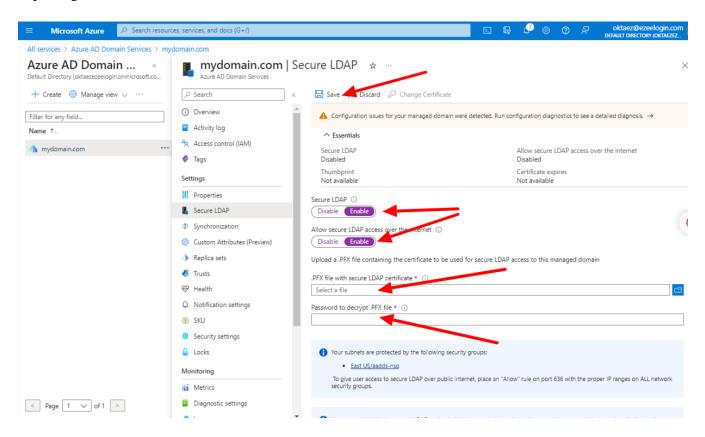
- Then select Local computer: (the computer this console is running on), then click Finish.
- In the MMC window, expand Console Root. Select Certificates (Local Computer), then expand the Personal node, followed by the Certificates node.



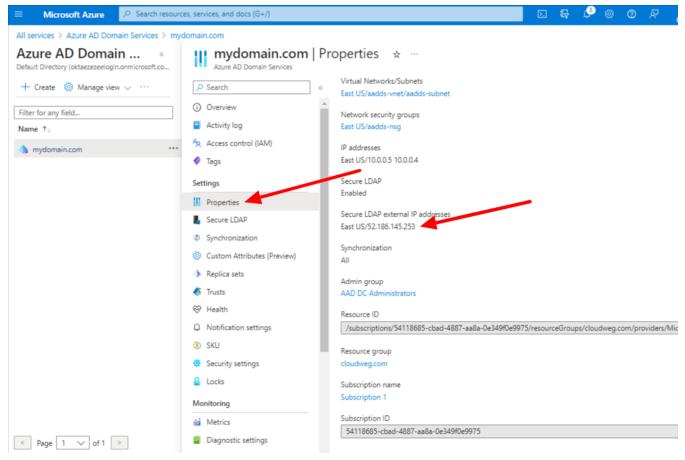
- Right-click on this certificate, then choose All Tasks > Export
- Export Private Key page, choose Yes, export the private key, then select Next.
- Select Personal Information Exchange PKCS #12 (.PFX) as the file format for the certificate. Check the box for Include all certificates in the certification path if possible
- Click Next and type a password and follow the prompts

You will get the certificate exported in pfx format. Now you can continue on Azure portal

Step 6: Select the folder icon next to .PFX file with secure LDAP certificate. Browse to the path of the .PFX file you exported in the previous step and enter the password to decrypt which you have used while exporting and save.



Step 7: Click on **Properties** and configure your DNS provider to create a host record to resolve to this **Secure LDAP external IP address.** You can configure this to your Local DNS forwarder or to your system host to resolve locally for testing.

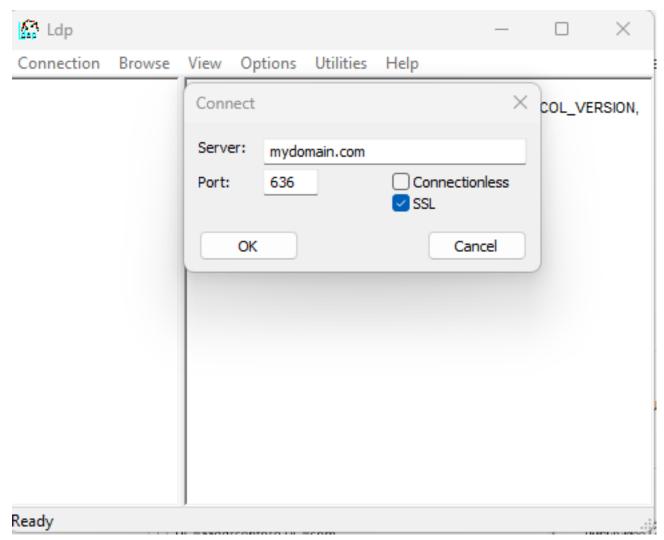


Test the LDAPS queries from an external system

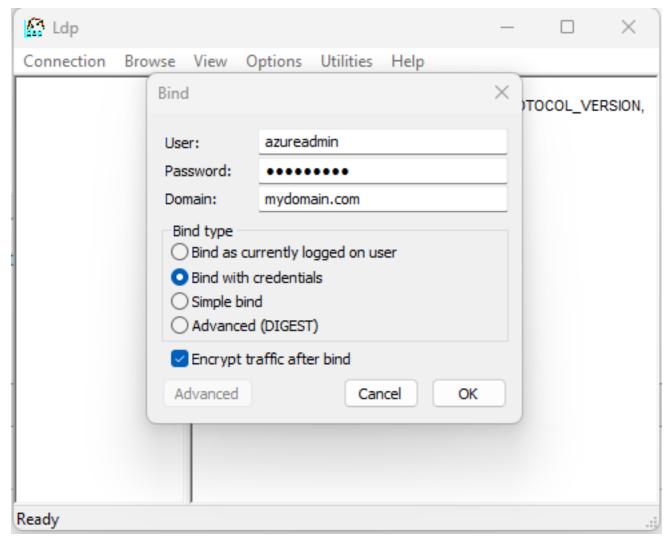
Step 1: Add the following Secure LDAP external IP address to your host file on the system

52.186.145.253 mydomain.com

Step 2: Open LDP.exe tools and enter the domain name, Port 636, select SSL and click ok



Step 3: Open **Connection > Bind,** Select **Bind with credentials** and input your **Username**, **Password, and Domain** of the **Azure Bind User**



Step 4: Open **View** -> **Tree** will list the entire Active Directory Tree.

Step 5: Check LDAPS from terminal

Step 5.a: Run LDAPSEARCH from the terminal as follows. Use "LDAPTLS_REQCERT=never" if you are using a **self-signed certificate**.

```
john@dellpc:~# LDAPTLS_REQCERT=never ldapsearch -H
ldaps://mydomain.com:636 -D "john@mydomain.com" -W -b
"DC=mydomain,DC=com"
```

Step 5.b: Run LDAPSEARCH from the terminal as follows if you are using valid certificate.

```
john@dellpc:~# ldapsearch -H ldaps://mydomain.com:636 -D
"john@mydomain.com" -W -b "DC=mydomain,DC=com"
```

Step 5.c: Run LDAPSEARCH from the terminal as follows if you want to force TLS connection.

```
john@dellpc:~# ldapsearch -H ldaps://mydomain.com:636 -D
"john@mydomain.com" -W -b "DC=mydomain,DC=com" -ZZ
```

Related Articles:

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Integrate Azure AD in Ezeelogin jump server

Online URL: https://www.ezeelogin.com/kb/article/integrate-azure-ad-with-ldap-627.html