

# Integrate azure AD with LDAP

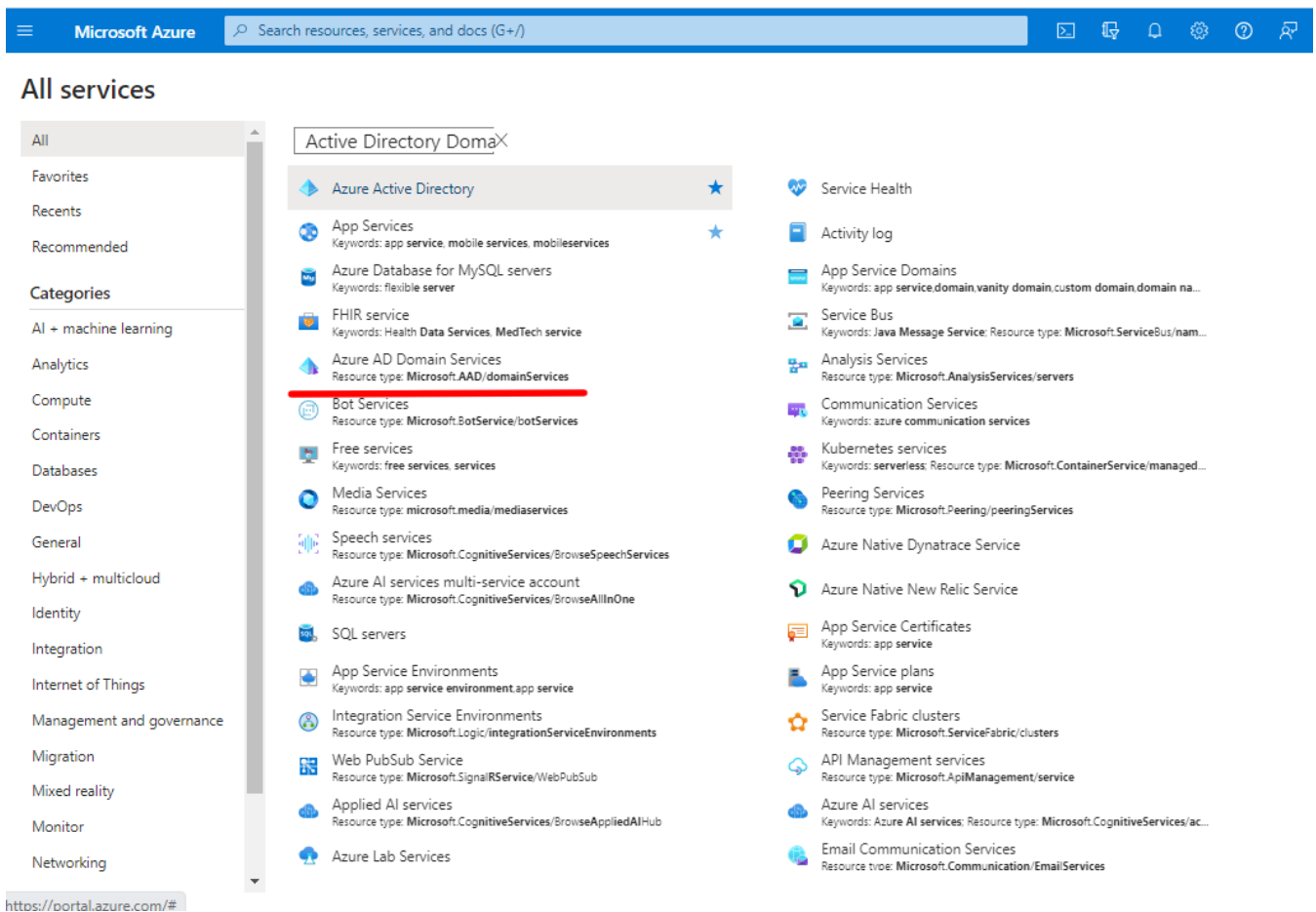
627 Manu Chacko April 30, 2024 [Getting Started](#) 1959

Enable LDAPS on Azure AD and integrate it into your application. Configure secure LDAP for an Azure Active Directory Domain Services

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.

## 1. Log into the Azure portal, Search, and Select Azure AD Domain Services



## 2. Select your Managed Domain service

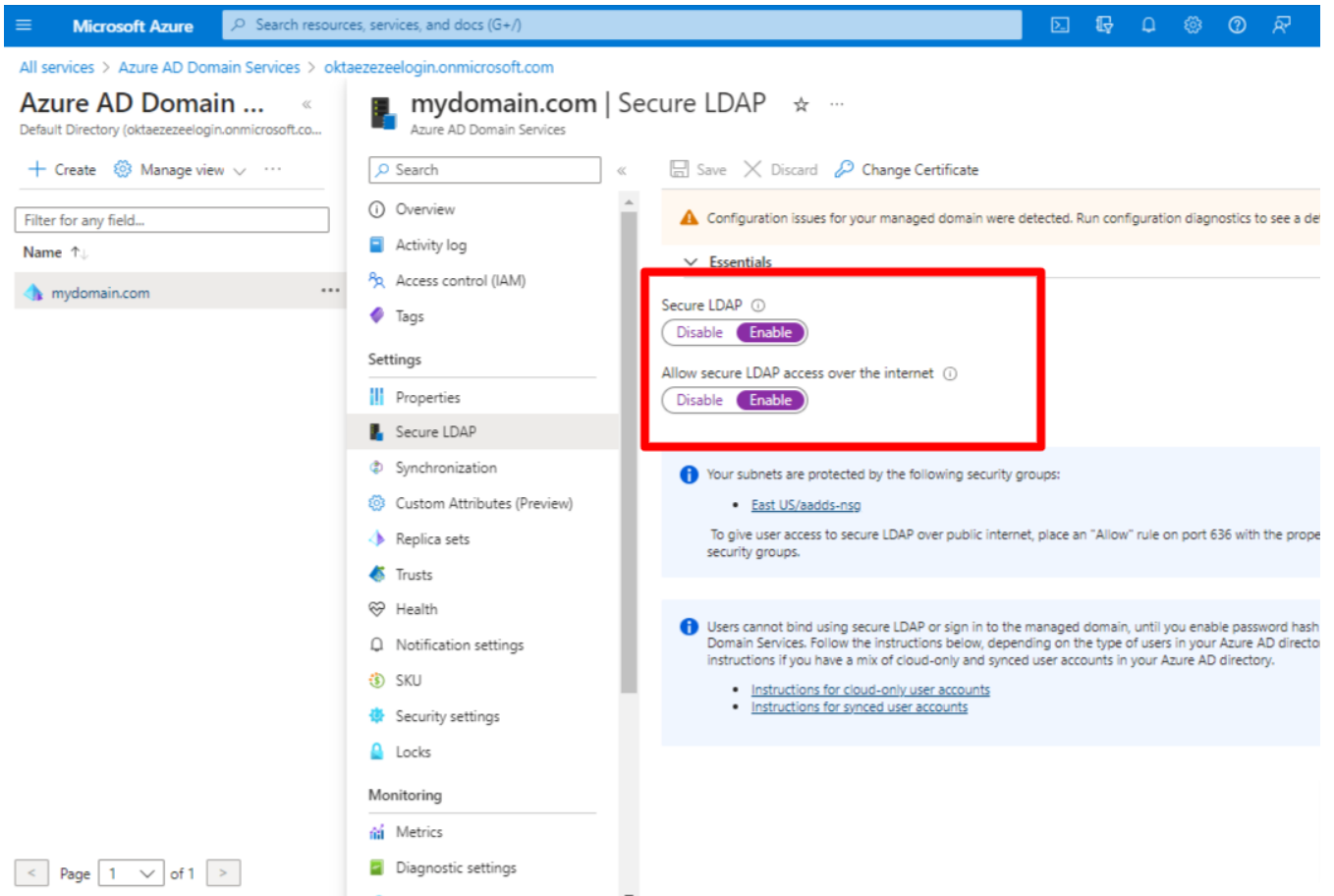
The screenshot shows the Microsoft Azure portal interface. At the top, there is a search bar and navigation icons. Below the search bar, the page title is 'Azure AD Domain Services' with a sub-header 'Default Directory (oktaezezeelogin.onmicrosoft.com)'. There are several action buttons: '+ Create', 'Manage view', 'Refresh', 'Export to CSV', 'Open query', and 'Assign tags'. Below these buttons, there is a filter section with a search box 'Filter for any field...' and three active filters: 'Subscription equals all', 'Resource group equals all', and 'Location equals all'. A 'No grouping' dropdown is also visible. The main content area shows a table with one record. The table has columns for 'Name', 'Type', 'Resource group', and 'Location'. The record is 'mydomain.com', 'Azure AD Domain Services', 'cloudweg.com', and 'East US'. A red arrow points to the 'mydomain.com' entry in the 'Name' column.

Name ↑↓	Type ↑↓	Resource group ↑↓	Location ↑↓
<input type="checkbox"/> mydomain.com	Azure AD Domain Services	cloudweg.com	East US

## 3. Select Secure LDAP

The screenshot displays the Azure portal interface for managing an Azure AD Domain Service. The breadcrumb navigation shows 'All services > Azure AD Domain Services > Azure AD Domain ...'. The domain name 'mydomain.com' is visible. The left-hand navigation pane lists various settings, with 'Secure LDAP' highlighted by a red arrow. The main content area shows the domain's status as 'Running' with a green checkmark and a 'View health' button. Below this, there is a section for 'Azure AD Domain Services SKUs' with a 'Choose SKU' button. A warning banner at the top indicates 'Configuration issues for your managed domain were detected. Run configuration diagnostics to see a de...'. The page footer shows 'Page 1 of 1'.

#### 4. Enable **secure LDAP** and **Allow secure access over the Internet**



You should need a digital certificate to encrypt the communication to use secure LDAP. You can get a certificate from a public certificate authority (CA) or an enterprise CA or a self-signed certificate

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

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
```

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

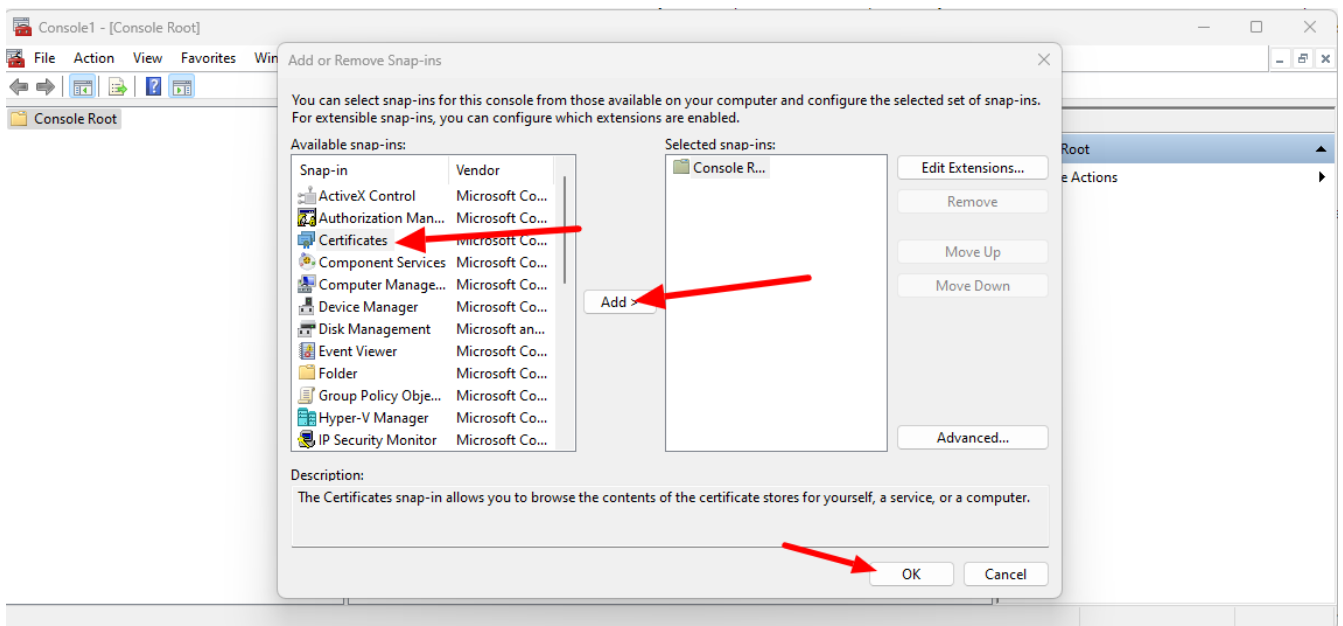
PSParentPath: Microsoft.PowerShell.Security\Certificate::LocalMachine\MY

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

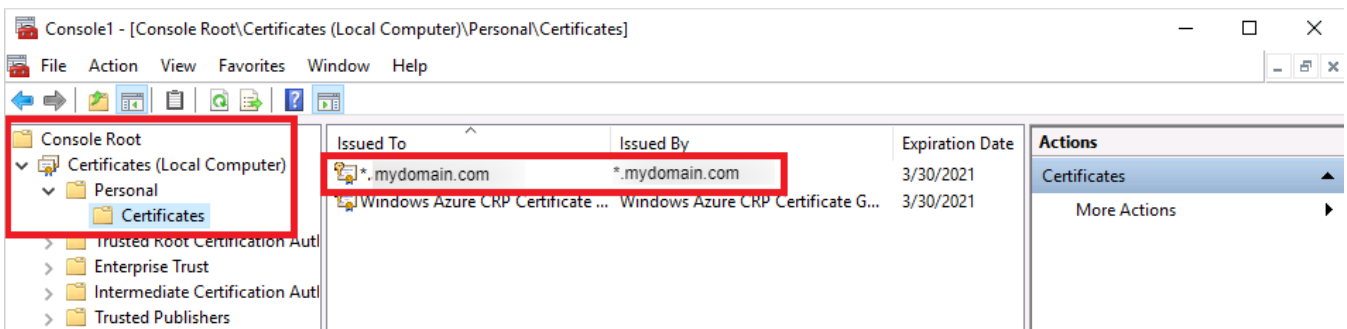
b) Export a certificate for Azure AD DS

- 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

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.

Microsoft Azure | Search resources, services, and docs (G+)

oktaez@ezeelogin.com  
DEFAULT DIRECTORY (OKTAEZ...

All services > Azure AD Domain Services > mydomain.com

### Azure AD Domain ...

Default Directory (oktaezeelogin.onmicrosoft.co...

+ Create Manage view

Filter for any field...

Name ↑

mydomain.com

Search

Save Discard Change Certificate

Configuration issues for your managed domain were detected. Run configuration diagnostics to see a detailed diagnosis. →

#### Essentials

Secure LDAP	Allow secure LDAP access over the internet
Disabled	Disabled
Thumbprint	Certificate expires
Not available	Not available

Secure LDAP

Disable Enable

Allow secure LDAP access over the internet

Disable Enable

Upload a .PFX file containing the certificate to be used for secure LDAP access to this managed domain

.PFX file with secure LDAP certificate \*

Select a file

Password to decrypt .PFX file \*

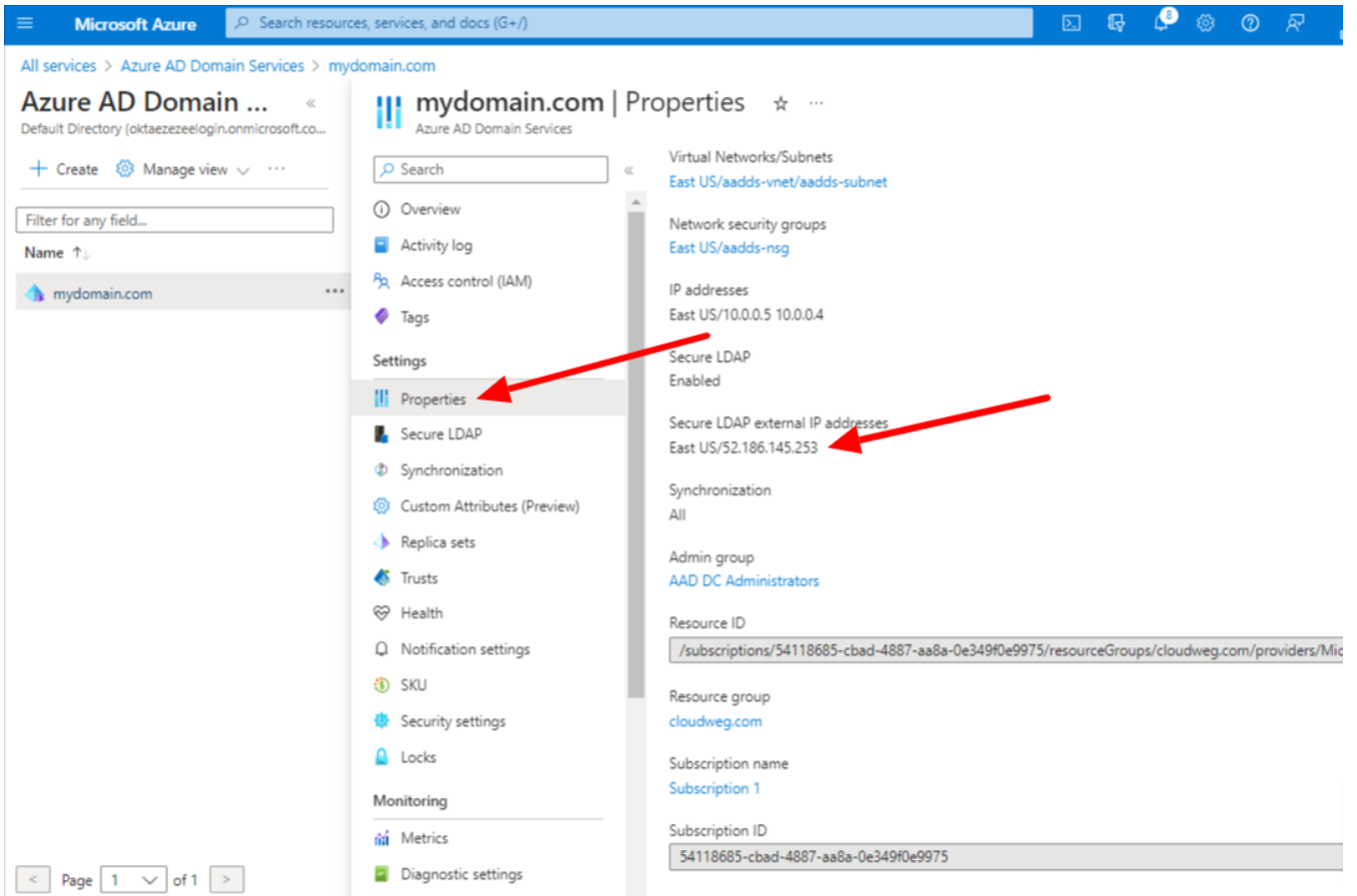
Your subnets are protected by the following security groups:

- East US/aadds-nsg

To give user access to secure LDAP over public internet, place an "Allow" rule on port 636 with the proper IP ranges on ALL network security groups.

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7. Click on **Properties** and add configure your DNS provider to create a host record to resolve to this **Secure LDAP external IP address**



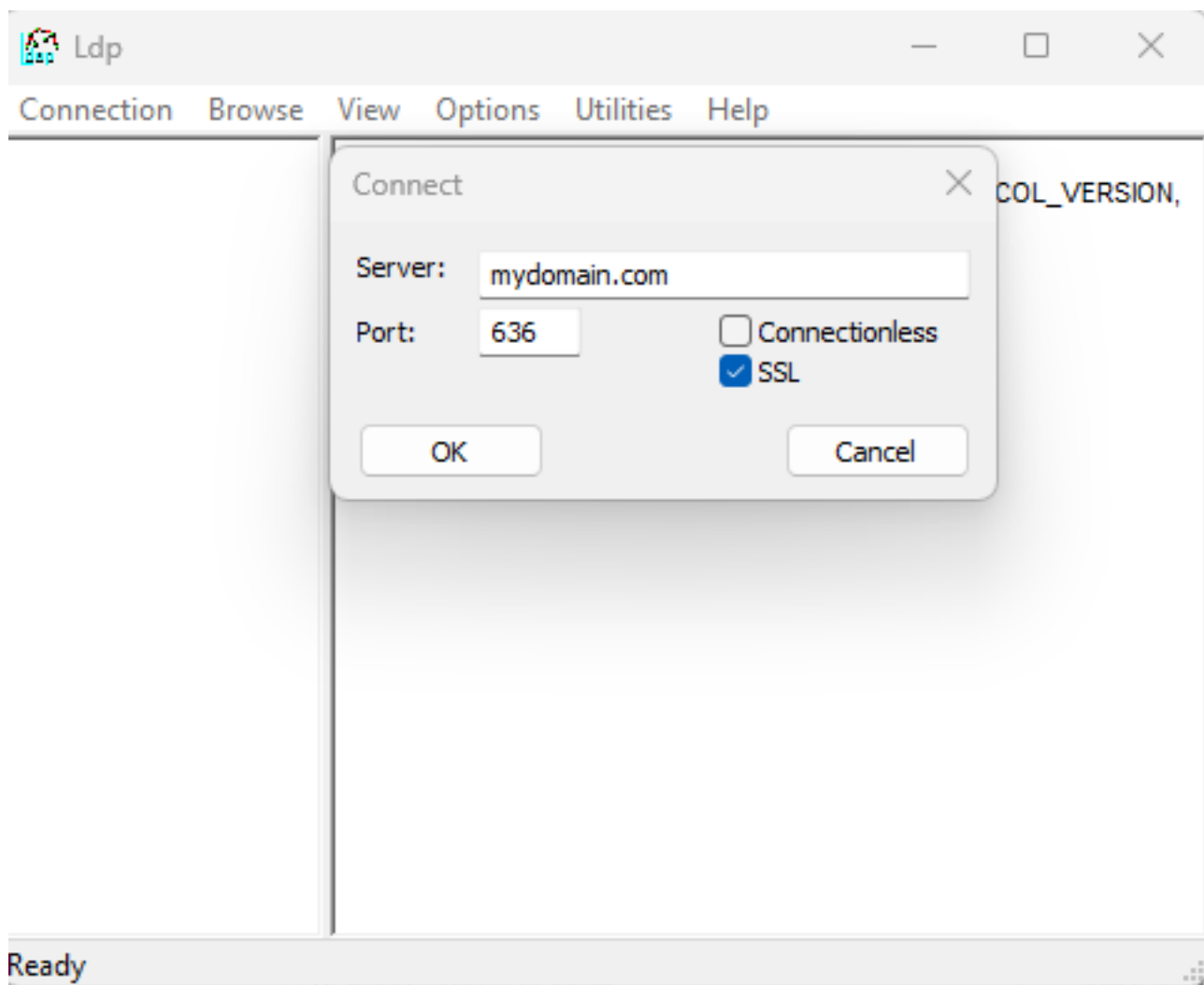
You can configure this to your Local DNS forwarder or to your system host to resolve locally for testing.

Test the LDAPS queries from an external system

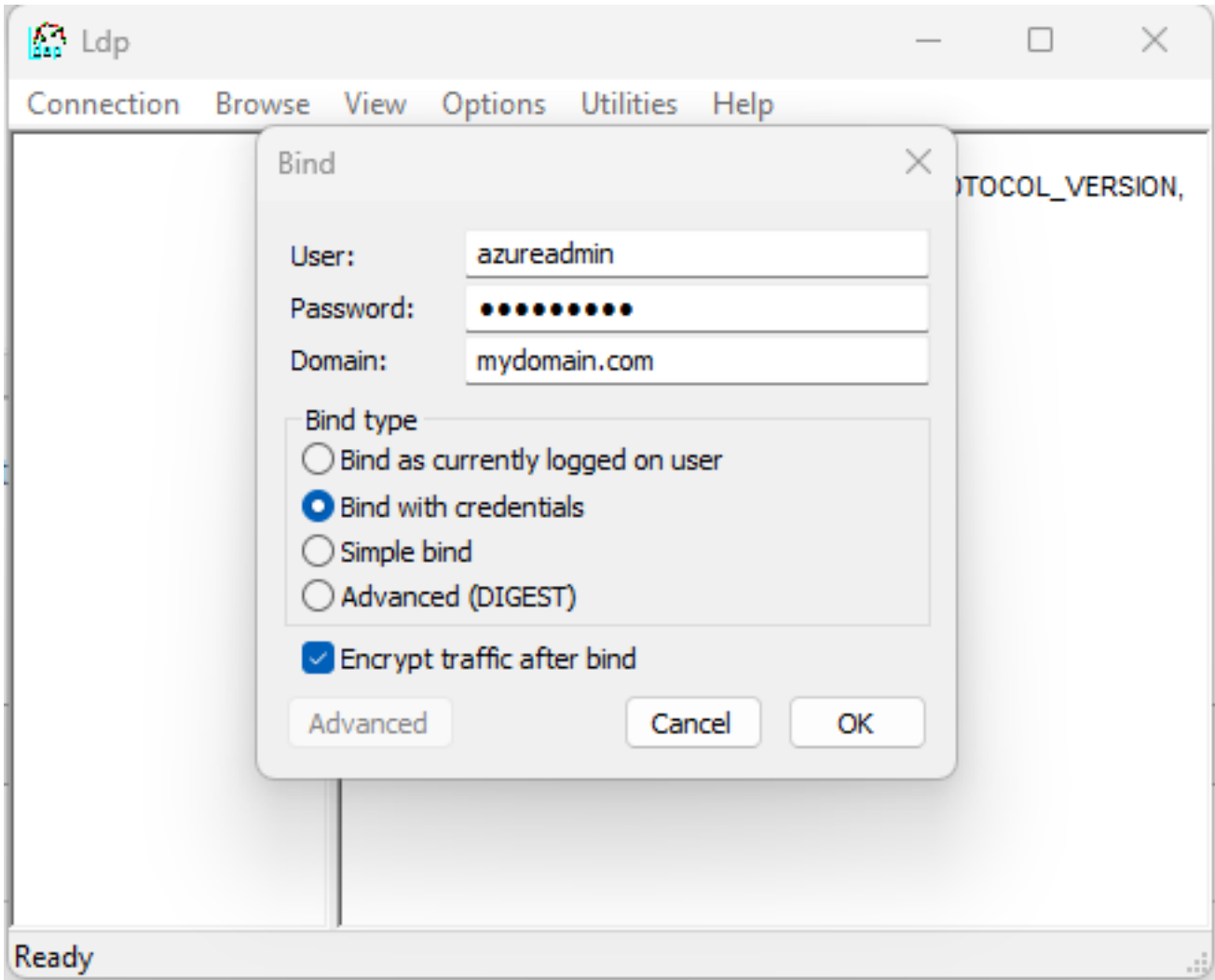
Add the following **Secure LDAP external IP address** to your host file on the system

1. Open LDP.exe tools and enter the domain name, Port 636, select **SSL** and click **ok**





2. Open **Connection > Bind**, Select **Bind with credentials** and input your **Username, Password, and Domain** of the Azure Bind User



3. Open **View > Tree** will list the entire Active Directory Tree.

You can also run LDAPSEARCH from your terminal as follows. You should use "LDAPTLS\_REQCERT=never" if you are using a self-signed certificate.

Related Articles

[Can we map existing user group in ldap to ezeelogin as ezeelogin user group ?](#)

## [Assigning user group for LDAP users?](#)

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