

# Azure Front Door

Custom Domain

Bring your own Certificate

# Steps for Certificate Handling and Domain Setup

## Private Key and PEM Certificate Creation

- Generate/Buy a private key during CSR and create a PEM certificate to establish server-client trust securely.

## PEM to PFX Conversion

- Use OpenSSL to convert PEM and private key files into a secure PFX format for platform compatibility. (When prompt for password, enter your password)

## Upload to Cloud Key Vault

- Upload the PFX file to a secure cloud key vault for centralized certificate management and access control.

## Configure Custom Domain with Certificate

- Add the certificate to the Front Door secret and configure the custom domain for secure communication.

# PEM to PFX Conversion

**# private key file (create during the generation of CSR file)**

dev.sandpitlabs.com.key

**# pem cert file**

dev\_sandpitlabs\_com.pem

**# convert to pfx with privage key**

openssl pkcs12 -export -out dev\_sandpitlabs\_com.pfx -inkey dev.sandpitlabs.com.key -in  
dev\_sandpitlabs\_com.pem

# Import to Azure Key Vault

Microsoft Azure

Home > Key vaults > kv-frontdoor-001 | Certificates

### Create a certificate

Method of Certificate Creation: Import

Certificate Name: dev-sandbox-com1

Upload Certificate File: dev\_sandbox\_com.pfx

Password: [REDACTED]

Tags: [Link]

Create Cancel

Microsoft Azure

Home > Key vaults > kv-frontdoor-001

### kv-frontdoor-001 | Certificates

Search: [Search bar]




Generate/Import Refresh Restore Backup Manage deleted certificates Certificate Contacts Certificate Authorities

Name	Thumbprint	Status	Expiration date
Completed			
dev-sandbox-com	F37FC9A2B07F8669B76ACAA3CCD5750075684D	✓ Enabled	10/25/2026
test-sandbox-com	0708E4B1AC46254E727A82EE004EE64C51F7D	✓ Enabled	9/23/2026
In progress, failed or cancelled			
There are no certificates available.			






Left sidebar: Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Access policies, Resource visualizer, Events, Objects, Keys, Secrets, Certificates (selected), Settings, Access configuration, Networking, Microsoft Defender for Cloud, Properties, Locks, Monitoring, Automation, Help.


- Ensure you have keyvault user access


# Access Policy for Keyvault


 **kv-frontdoor-001** | Access policies  


Key vault


 <<  Create  Refresh |  Delete  Edit


 Overview


 Activity log


 Access control (IAM)


 Tags


 Diagnose and solve problems


 **Access policies**


 Resource visualizer


 Events


 > Objects


 > Settings


 Access configuration


 Networking


 Microsoft Defender for Cloud

 Properties



 Locks

 > Monitoring





 > Automation

 > Help

Access policies enable you to have fine grained control over access to vault items. [Learn more](#)

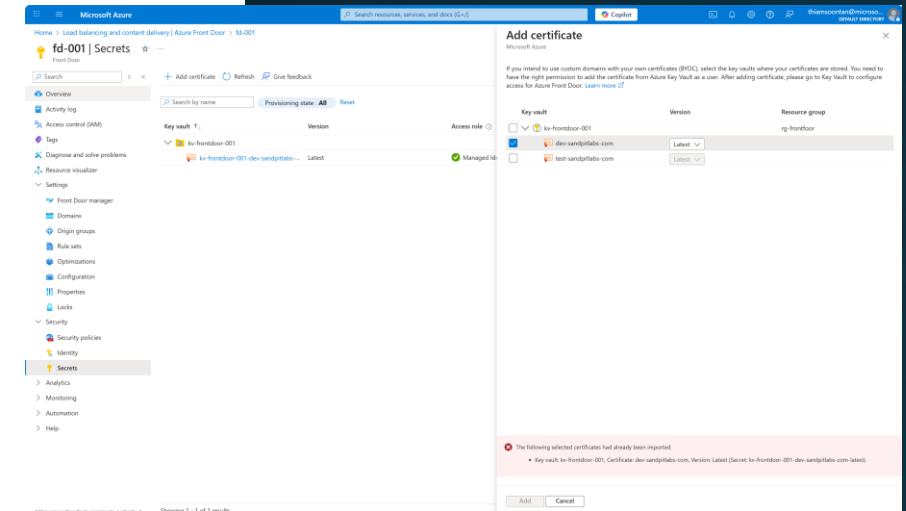
**Permissions : All**  **Type : All** 

Showing 1 to 2 of 2 records.

<input type="checkbox"/> Name 	Email 	Key Permissions	Secret Permissions	Certificate Permissions
 APPLICATION				
<input type="checkbox"/> fd-001			Get, List, Set, Delete, Recover, Backup, ...	Get, List, Update, Create, Import, Delet...
 USER				
<input type="checkbox"/> Thiam Soon Tan	thiamsoontan@microsoft.com		Get, List, Set, Delete, Recover, Backup, ...	Get, List, Update, Create, Import, Delet...

# Configure Custom Domain with Certificate

- Ensure FD managed identity has access to the Keyvault
- Upload Certificate to Front door > Security > Secrets
- Select the certificates from Keyvault you upload in the previous steps



# Configure Custom Domain with Certificate

Microsoft Azure

Search resources, services, and docs (G+)

[Home](#) > [Load balancing and content delivery | Azure Front Door](#) > [fd-001 | Domains](#) >

## Add a domain

Microsoft Azure

The endpoint name specifies a desired subdomain on Front Door's default domain (i.e. z01.azurefd.net) to route traffic from that host via Front Door. You can optionally onboard custom domains as well. [Learn more](#)

Domain type

☒ Non-Azure validated domain  
☐ Azure pre-validated domain

DNS management

☐ Azure managed DNS (Recommended)  
☒ All other DNS services

Custom domain \*

dev.sandpitlabs.com

⚠ Your domain will need to be validated before traffic is delivered.

HTTPS

Enable HTTPS protocol for a custom domain that's associated with Front Door to ensure that sensitive data is delivered securely via SSL/TLS encryption when sent across the Internet. [Learn more](#)

Certificate type

☐ AFD managed (Recommended)  
☒ Bring Your Own Certificate (BYOC)

Secret \*

kv-frontdoor-001-dev-sandpitlabs-com-latest

ⓘ Add secrets to your Front Door profile from the secrets page. [Learn more](#)

TLS policy

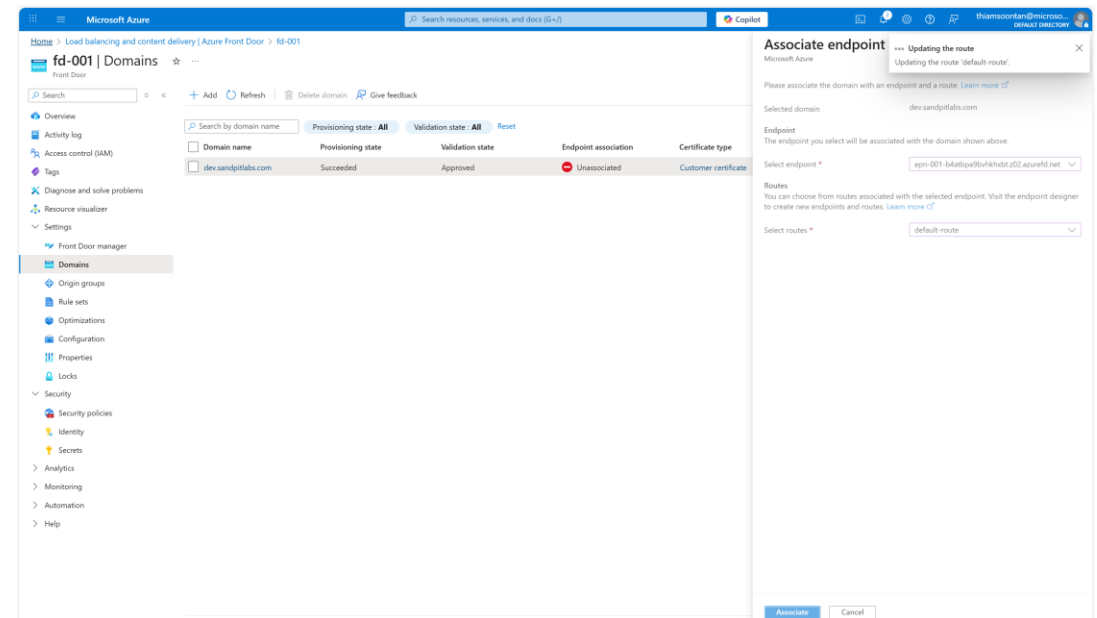
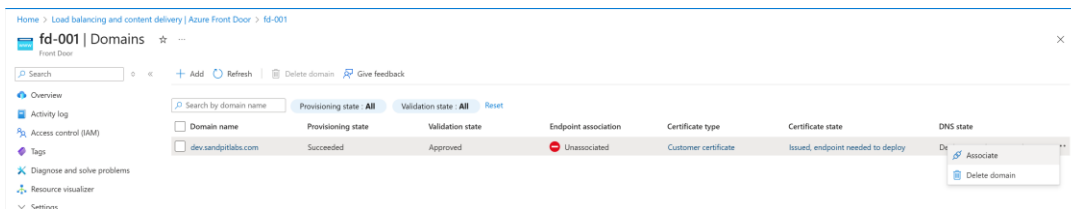
TLS v1.2\_2023

[View policy details](#)

Add

Cancel

# Associate the Domain





# Note:

Your domain will need to be validated before traffic is delivered

# Testing

Add your domain to the Host file to test locally

Path of Host file:  
C:\Windows\System32\drivers\etc