

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

The image shows two screenshots of the Microsoft Azure portal. The left screenshot is titled 'Create a certificate' and shows the 'Import' method selected. It includes fields for 'Certificate Name' (dev-sandpitabs-com1), 'Upload Certificate File' (dev-sandpitabs.com.pfx), and 'Password'. The right screenshot shows the 'Certificates' blade for the key vault 'kv-frontdoor-001'. It displays a table with two entries: 'dev-sandpitabs-com' and 'test-sandpitabs-com'. Both certificates are listed as 'Completed' with their respective thumbprints, status (Enabled), and expiration dates (10/25/2026 and 9/23/2026).

Name	Thumbprint	Status	Expiration date
dev-sandpitabs-com	F37FC1A26378B66FB5764CAA2CCD575097584D	Enabled	10/25/2026
test-sandpitabs-com	07D6EAB1AC66254E727A653EE60E4E64C61F70	Enabled	9/23/2026

- Ensure you have keyvault user access

Access Policy for Keyvault

kv-frontdoor-001 | Access policies ⭐ ...

Key vault

Search Create Refresh Delete Edit

Overview Activity log Access control (IAM) Tags Diagnose and solve problems Access policies (selected) 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](#)

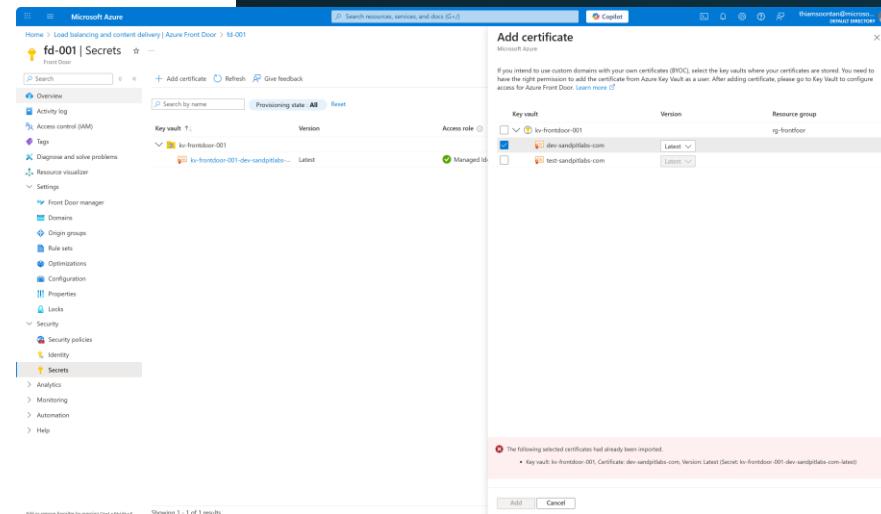
Search Permissions : All Type : All

Showing 1 to 2 of 2 records.

Name ↑↓	Email ↑↓	Key Permissions	Secret Permissions	Certificate Permissions
fd-001			Get, List, Set, Delete, Recover, Backup, ...	Get, List, Update, Create, Import, Delet...
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 * ✓

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

TLS policy ▼
[View policy details](#)

Add Cancel

Associate the Domain

The screenshot shows the 'fd-001 | Domains' page under the 'Front Door' section. It displays a table with one row for the domain 'dev.sandpitlabs.com'. The columns include 'Domain name', 'Provisioning state', 'Validation state', 'Endpoint association', 'Certificate type', 'Certificate state', and 'DNS state'. The 'Endpoint association' column shows 'Unassociated'. A context menu is open over this row, with the 'Associate' option highlighted.

The screenshot shows the 'Associate endpoint' dialog box. It includes fields for 'Selected domain' (set to 'dev.sandpitlabs.com'), 'Endpoint' (set to 'epn-001-b4af5ipa9vhkhvbt202.azurefd.net'), and 'Select routes' (set to 'default-route'). The 'Associate' button is at the bottom right.

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