

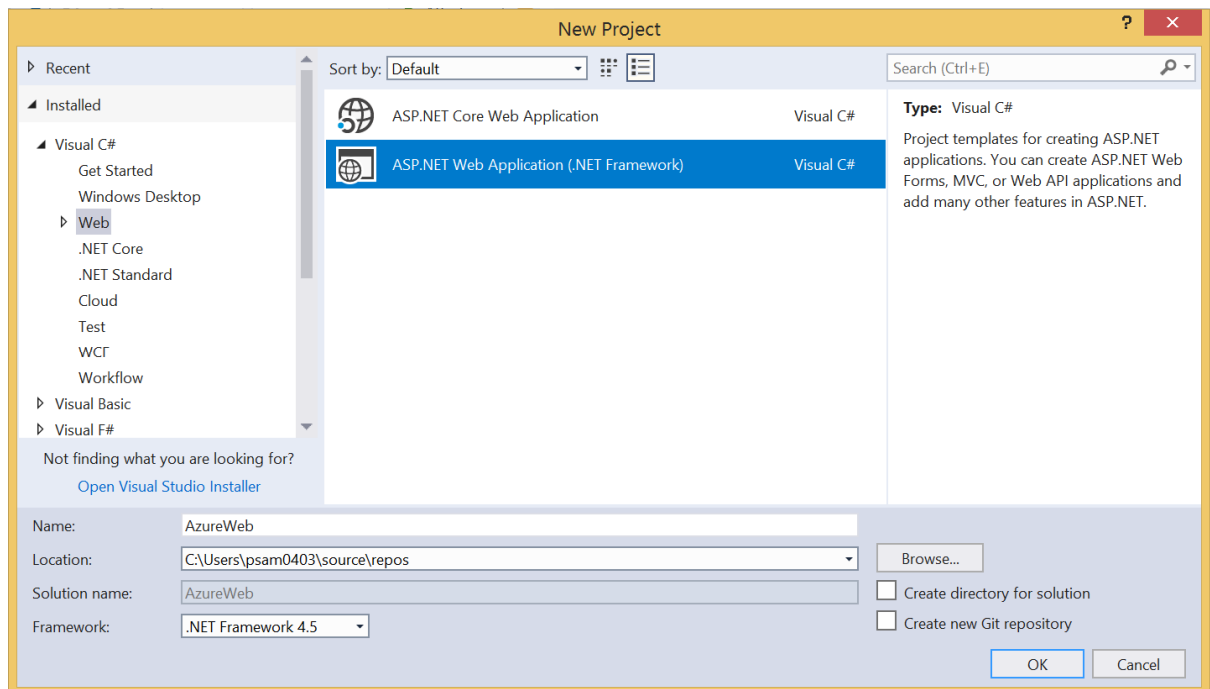
How to add Content Delivery Network (CDN) to Azure Web App

In this tutorial I'm going to show how to:

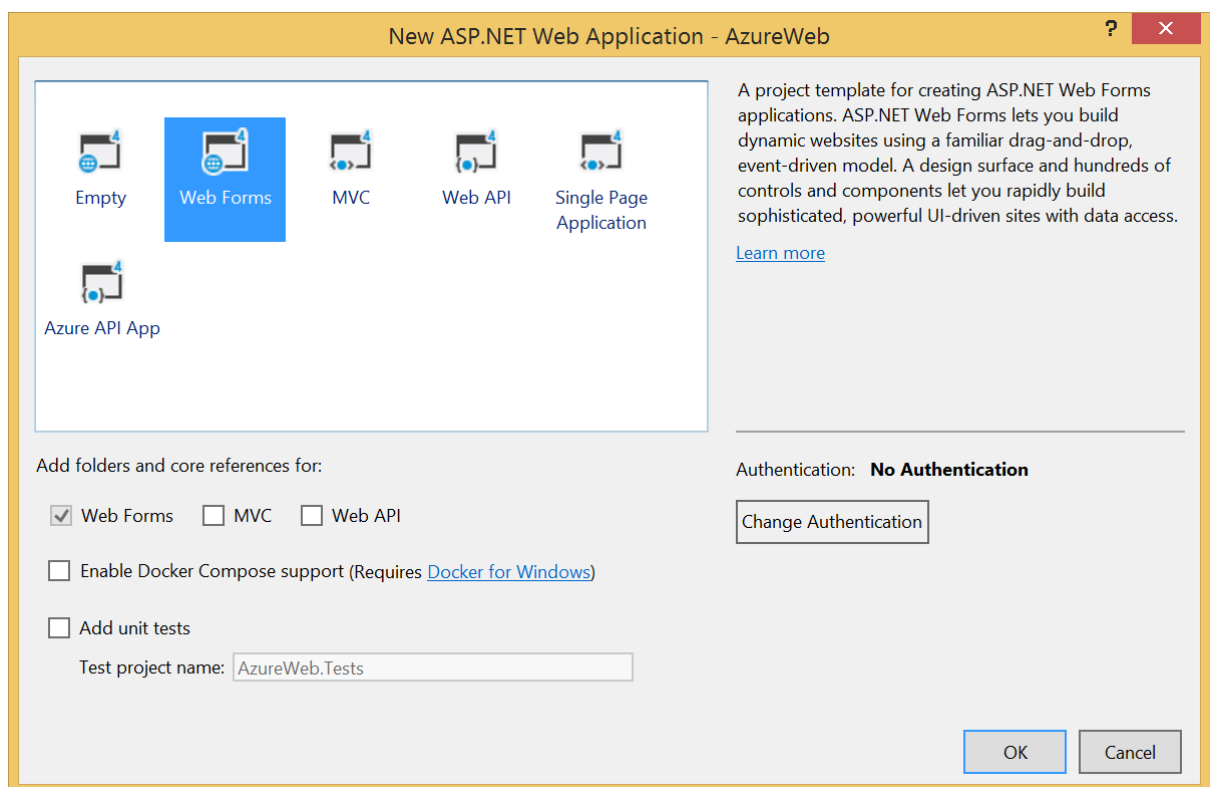
- Create an ASP.NET Web Application and publish to Azure
- Configure CDN end point to this Web Site

Step 01: Create an ASP.NET Web Application and publish to Azure

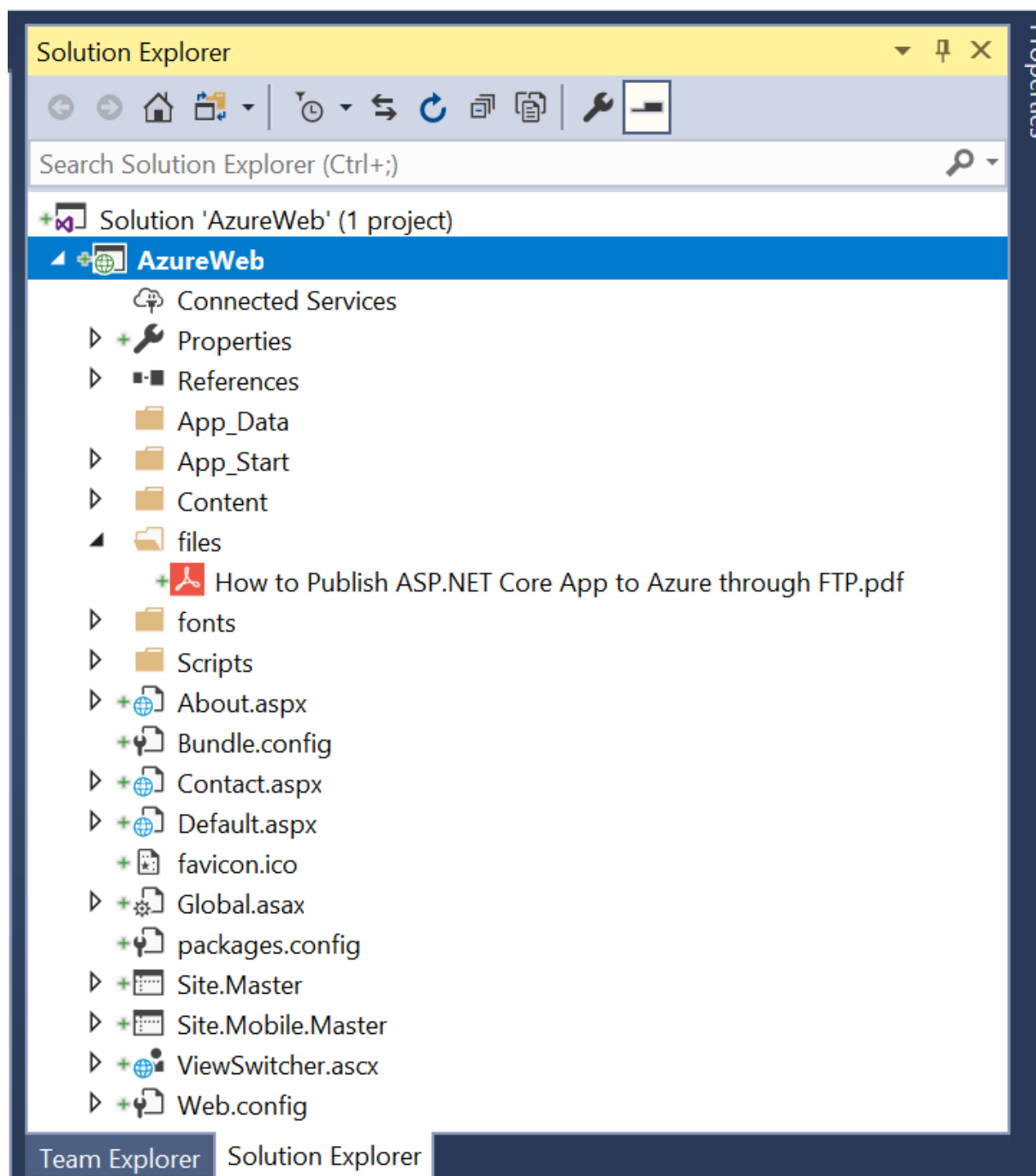
Create a new ASP.Net Web Project – Name it AzureWeb.



- Web Forms



Next create a folder called files and copy a big pdf inside it.



Scenario:

- Mind you I'm located in Melbourne Australia.
- But we are going to create an App Service Plan in Central US.
- So, we are going to access the pdf file from Australia, and it will show how the distance going to affect when delivering the file from Central US to Australia.
- Then I'm going to create a CDN end point for this web application and access the same file.
- For the first time we are going to experience some latency but for the second time it will be quicker than earlier.
- It will be faster next time because it will be cached in the CDN end point near to your location.

I have below resources in my Azure subscription and I'm going to use them for my tutorial.

- Resource Group: patsam-rg
- App Service Plan: patsam-sp (Central US)
- App Service: patsam

Home > Resource groups

Resource groups

RXP Services Ltd

+ Add Edit columns Refresh Export to CSV Assign tags Feedback

Filter by name... Subscription == all Location == all Add filter

Showing 1 to 1 of 1 records.

<input type="checkbox"/> Name ↑↓	Subscription ↑↓	Location ↑↓	
<input type="checkbox"/> patsam-rg	Visual Studio Enterprise - MPN	Central US	...

Home > App Service plans

App Service plans

RXP Services Ltd

+ Add Edit columns Refresh Assign tags

Subscriptions: Visual Studio Enterprise - MPN - Don't see a subscription? [Open Directory + Subscription settings](#)

Filter by name... All resource groups All locations All tags No grouping

1 items

<input type="checkbox"/> Name ↑↓	Apps	Pricing Tier	Resource group ↑↓	Subscription ↑↓
<input type="checkbox"/> patsam-sp	1	patsam-sp (F1: Free)	patsam-rg	Visual Studio Enterprise - M... ..

Home > App Services

App Services

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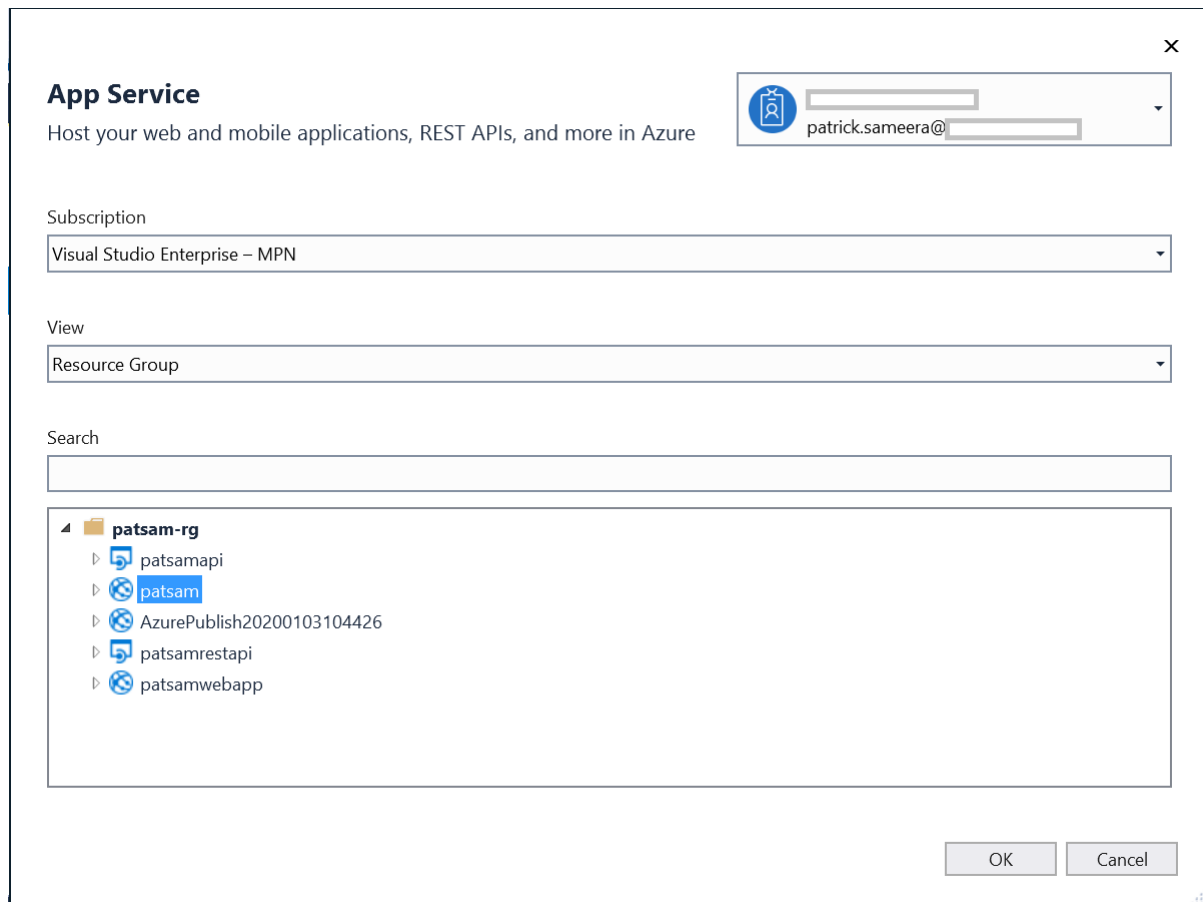
+ Add Edit columns Refresh Export to CSV Assign tags Start Restart Stop Delete Feedback Leave preview

Filter by name... Subscription == all Resource group == all Location == all Add filter

Showing 1 to 1 of 1 records.

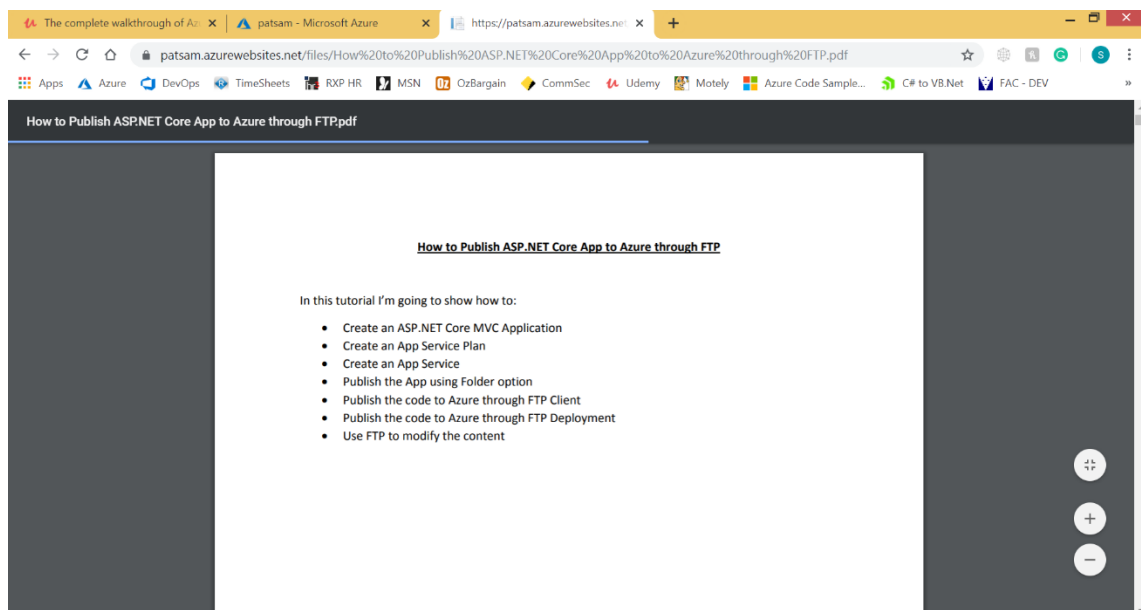
<input type="checkbox"/> Name ↑↓	Status ↑↓	Location ↑↓	Pricing Tier ↑↓	App Service Plan ↑↓	Subscription ↑↓	App Type ↑↓
<input type="checkbox"/> patsam	Running	Central US	Free	patsam-sp	Visual Studio Enterpri...	Web App ..

Next publish the web app.



Once the publish completed, browse the URL and access the pdf file we uploaded inside files folder. As you can see it takes bit of time.

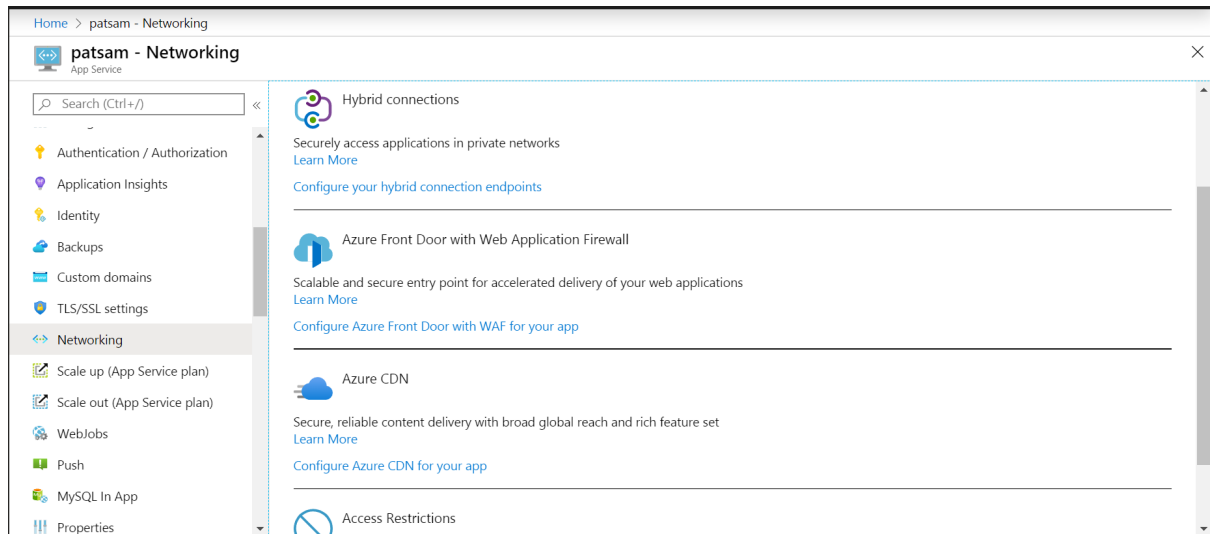
- <https://patsam.azurewebsites.net/>
- <https://patsam.azurewebsites.net/files/How%20to%20Publish%20ASP.NET%20Core%20App%20to%20Azure%20through%20FTP.pdf>



Step 02: Configure CDN end point to this Web Site

Go inside the App Service we created and click on Networking tab.

- App Service → Networking → Configure Azure CDN for your app



Provide relevant CDN details and click Create.

- CDN profile: patsam-cdn
- Pricing tier: Standard Akamai
- CDN end point name: patsamcdn.azureedge.net
- Origin host name: patsam.azurewebsites.net

[Home](#) > [patsam - Networking](#) > Azure CDN

Azure CDN

[Migrate custom domains to CDN](#) →

New endpoint

CDN profile ⓘ

☒ Create new ☐ Use existing

✓

Pricing tier ([View full pricing details](#)) *

▼

CDN endpoint name *

✓

.azureedge.net

Origin hostname ⓘ

[Create](#)

Once finish creating the CDN it should show the newly created CDN. Click on it.

The screenshot shows the Azure portal interface for the 'Azure Content Delivery Network'. The breadcrumb trail is 'Home > patsam - Networking > Azure CDN'. The main heading is 'Azure CDN'. Below it, a description states: 'The Azure Content Delivery Network (CDN) is designed to send audio, video, images, and other files faster and more reliably to customers using servers that are closest to the users. This dramatically increases speed and availability, resulting in significant user experience improvements.' A 'Learn more' link is provided. Under the 'Endpoints' section, there is a table with columns: Hostname, Status, and Protocol. The table contains one entry: 'patsamcdn.azureedge.net' with a status of 'Running' (indicated by a green checkmark) and a protocol of 'HTTP, HTTPS'. Below the table is a link 'Migrate custom domains to CDN' with a right-pointing arrow. At the bottom, there are links for 'New endpoint' and 'CDN profile'.

Hostname	Status	Protocol
patsamcdn.azureedge.net	Running	HTTP, HTTPS

We can see the CDN details.

The screenshot shows the 'patsamcdn (patsam-cdn/patsamcdn)' endpoint details page. The breadcrumb trail is 'Home > patsam - Networking > Azure CDN > patsamcdn (patsam-cdn/patsamcdn)'. The left sidebar contains a navigation menu with sections: 'Overview' (selected), 'Activity log', 'Access control (IAM)', 'Tags', 'Diagnose and solve problems', 'Settings' (with sub-items: 'Origin', 'Custom domains', 'Compression', 'Caching rules', 'Geo-filtering', 'Optimization'). The main content area has a search bar and action buttons: '+ Custom domain', 'Purge', 'Stop', and 'Delete'. Below these are details for the endpoint: 'Resource group (change) : patsam-rg', 'Status : Running', 'Location : Central US', 'Subscription (change) : Visual Studio Enterprise - MPN', 'Subscription ID : 3822b9c0-bf7e-455e-a1d1-8717b1b4150b'. On the right, 'Endpoint hostname : https://patsamcdn.azureedge.net', 'Origin hostname : https://patsam.azurewebsites.net', 'Protocols : HTTP, HTTPS', and 'Optimization type : General web delivery'. Below this is a 'Custom domains' section with a table header: 'Hostname', 'Custom HTTPS', and 'Details'. The table body states 'There are no custom domains to display'.

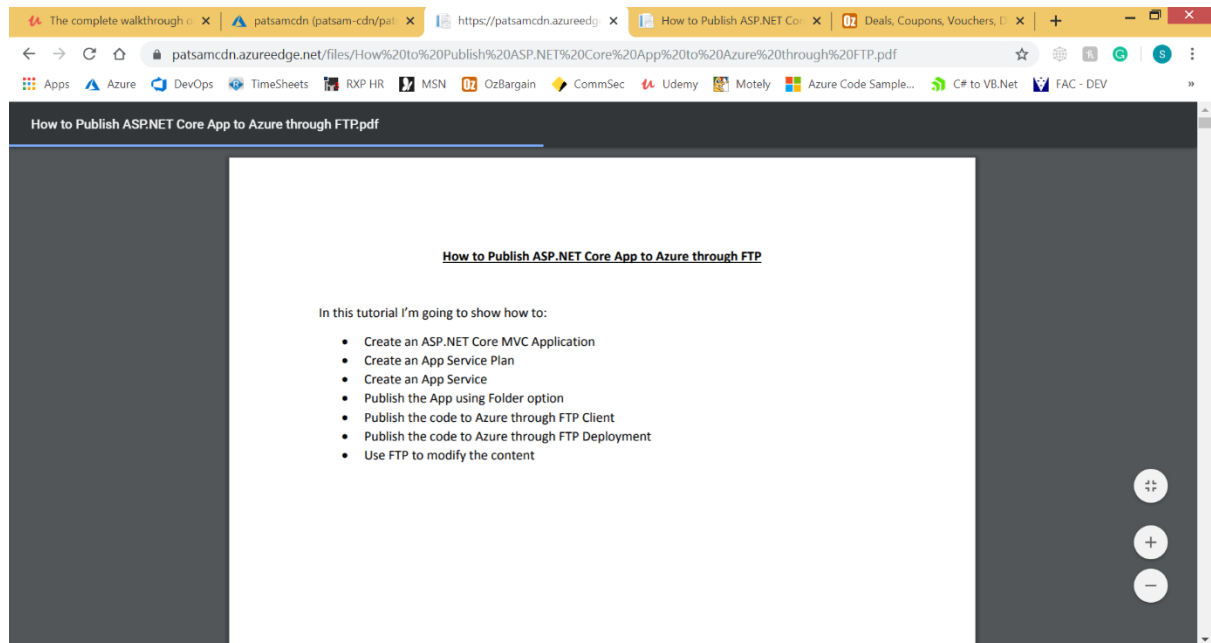
- <https://patsamcdn.azureedge.net/>

The screenshot shows a web browser displaying the ASP.NET website. The browser's address bar shows 'patsamcdn.azureedge.net'. The website has a dark navigation bar with 'Application name', 'Home', 'About', and 'Contact'. The main content area features a large 'ASP.NET' heading, followed by the text 'ASP.NET is a free web framework for building great Web sites and Web applications using HTML, CSS, and JavaScript.' and a 'Learn more »' button. Below this, there are three columns: 'Getting started' (ASP.NET Web Forms lets you build dynamic websites using a familiar drag-and-drop, event-driven model. A design surface and hundreds of controls and components let you rapidly build sophisticated, powerful UI-driven sites with data access.), 'Get more libraries' (NuGet is a free Visual Studio extension that makes it easy to add, remove, and update libraries and tools in Visual Studio projects.), and 'Web Hosting' (You can easily find a web hosting company that offers the right mix of features and price for your applications.). Each column has a 'Learn more »' button.

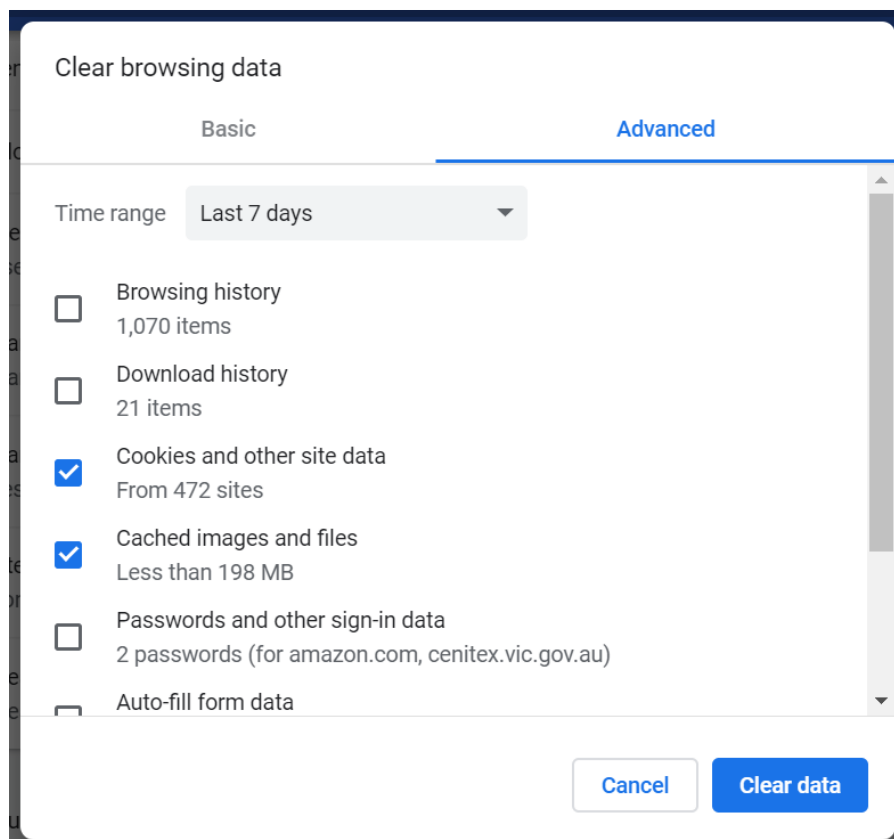
Browse the URL.

- <https://patsamcdn.azureedge.net/files/How%20to%20Publish%20ASP.NET%20Core%20App%20to%20Azure%20through%20FTP.pdf>

Since this is the first time, we are browsing the pdf file from the CDN endpoint, it takes same time as previously because it's going to copy the file to Australian region.

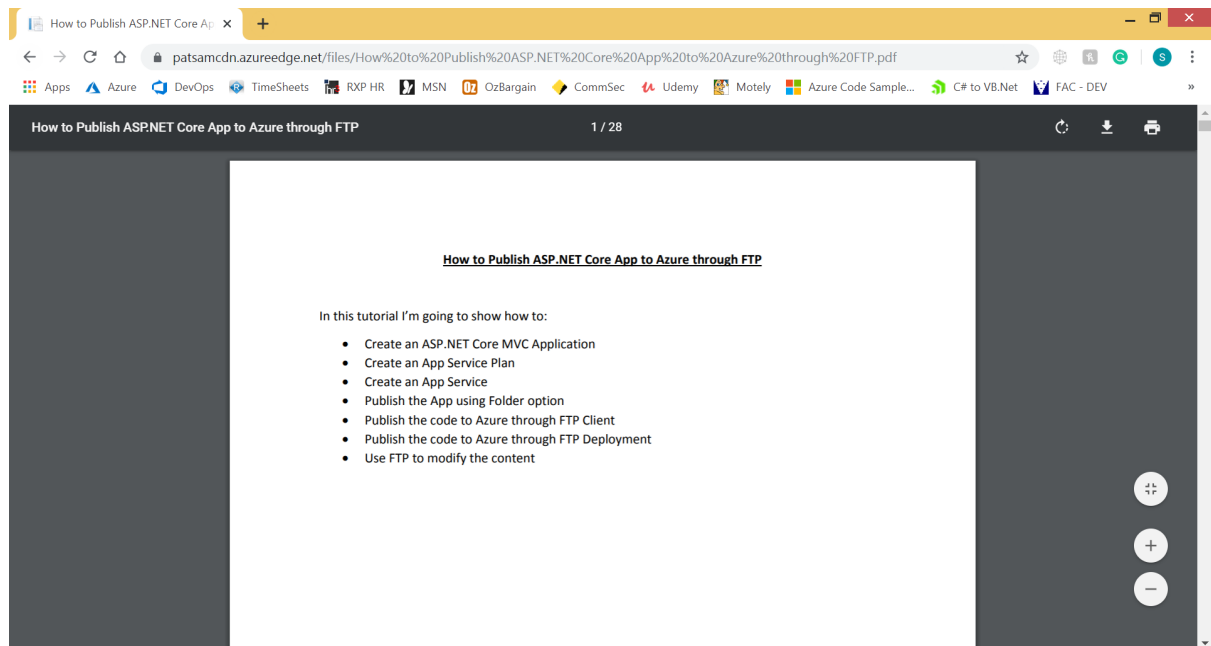


Next clear your browser history and cache.



Try browsing the URL again.

- <https://patsamcdn.azureedge.net/files/How%20to%20Publish%20ASP.NET%20Core%20App%20to%20Azure%20through%20FTP.pdf>



This time it loads the pdf file very quickly.

That is because this file is now cached in the CDN end point near to your location, and now onwards for any user who going to access the same file from Australian region it will be retrieved from the cache.

So that is the advantage of Content Deliver Network, where we can deliver high bandwidth content with low latency.