

Sunward Portal Management System

DOCUMENT INFORMATION

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|--------------|----------------------------------|
| Prepared by | Appcentric Technologies |
| Client | Sunward |
| Project Name | Sunward Portal Management System |
| Prepared by | Arun |
| Module Name | IIS Deployment & Publish |
| Pages | 7 |

Disclaimer and Confidentiality Statement

This document is a technical reference prepared by Appcentric Technologies for the Sunward Portal Management System project. It provides detailed information on the system architecture, technical approach, implementation methodology, and related technical specifications.

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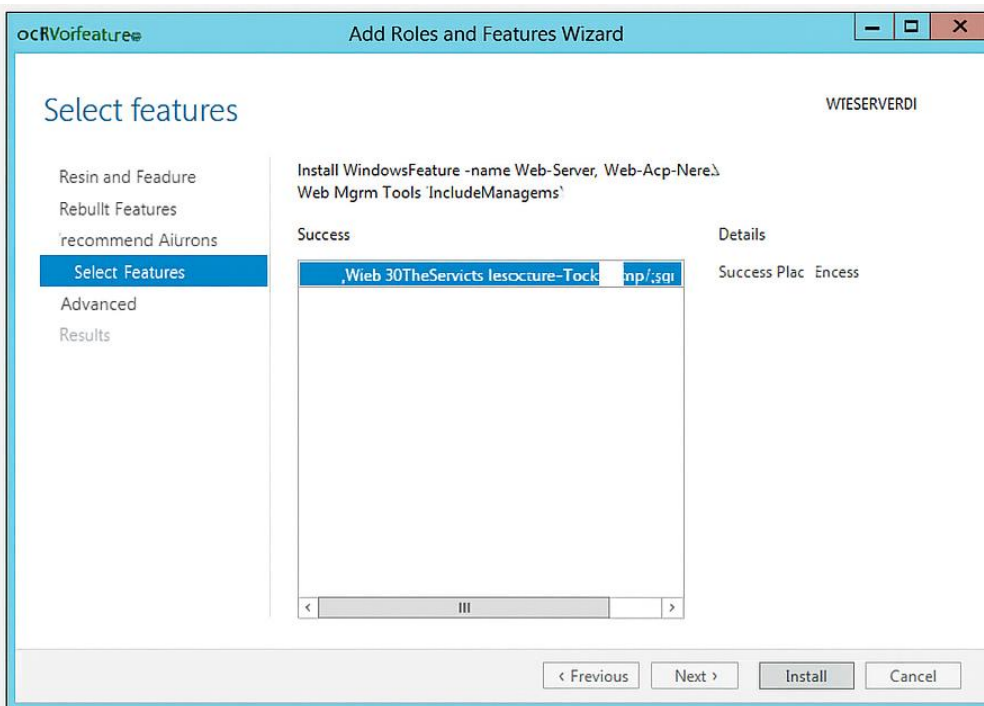
1. Preliminaries (what you need)

1. A Windows server (Windows Server 2016/2019/2022) with IIS installed OR access to an IIS server.
2. Administrator access on server.
3. Build/publish output of your web app (for ASP.NET Core publish folder or .NET Framework compiled site). Typical output folder: C:\Temp\Publish\SunwardPortal.
4. A DNS entry pointing portal.example.com → server IP (for production or test).
5. SSL certificate if using HTTPS.

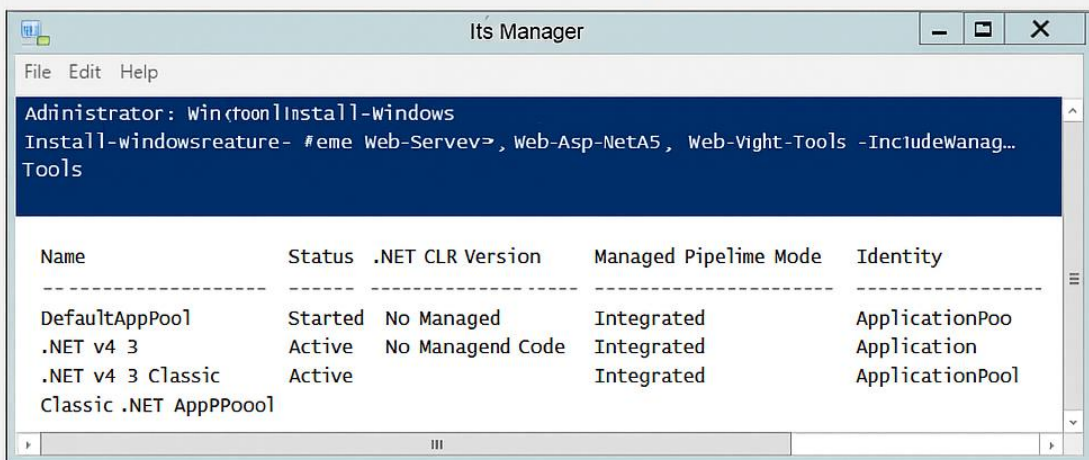
2. Install IIS & required features (if not already installed)

1. Open **Server Manager** → **Add Roles and Features**.
2. Select **Web Server (IIS)** and include:
3. Web Server → Application Development → **.NET Extensibility, ASP.NET, ISAPI Extensions, ISAPI Filters**
4. Management Tools → **IIS Management Console**
5. Install and reboot if required.
Screenshot: capture Server Manager after selecting features.
6. Install-WindowsFeature -name Web-Server, Web-Asp-Net45, Web-Mgmt-Tools - IncludeManagementTools

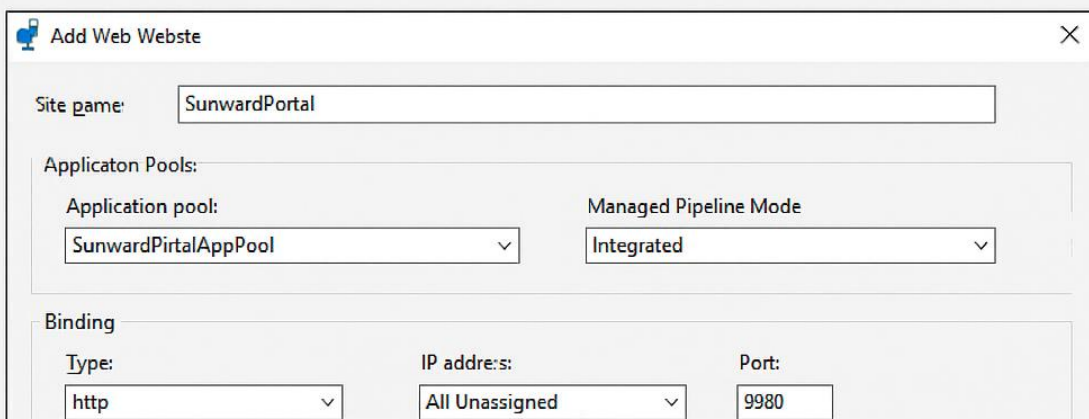
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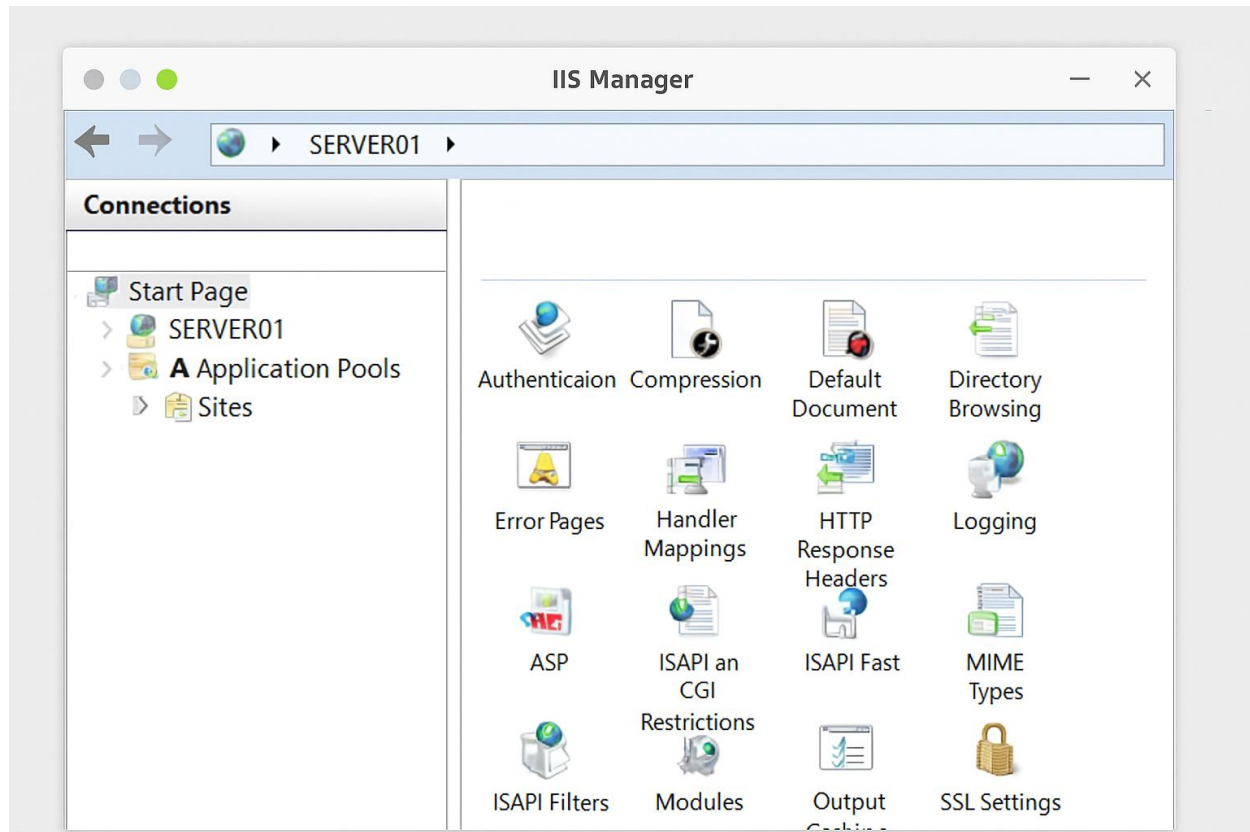


2. Install: ISNN. ImpTool\webawpp-eamd -lle : All Figure 1. sourcesstholl



3. SunwardPortalAppPool Add SunwardPortal added





3. Create Application Pool

1. Open **IIS Manager** (inetmgr).
2. Select **Application Pools** → **Add Application Pool...**
3. Name: SunwardPortalAppPool
4. .NET CLR Version: No Managed Code (for ASP.NET Core) or v4.0 for .NET Framework
5. Managed pipeline: Integrated
6. Click **OK**.

Screenshot: new App Pool highlighted.

Internet Information Services (IIS) Manager

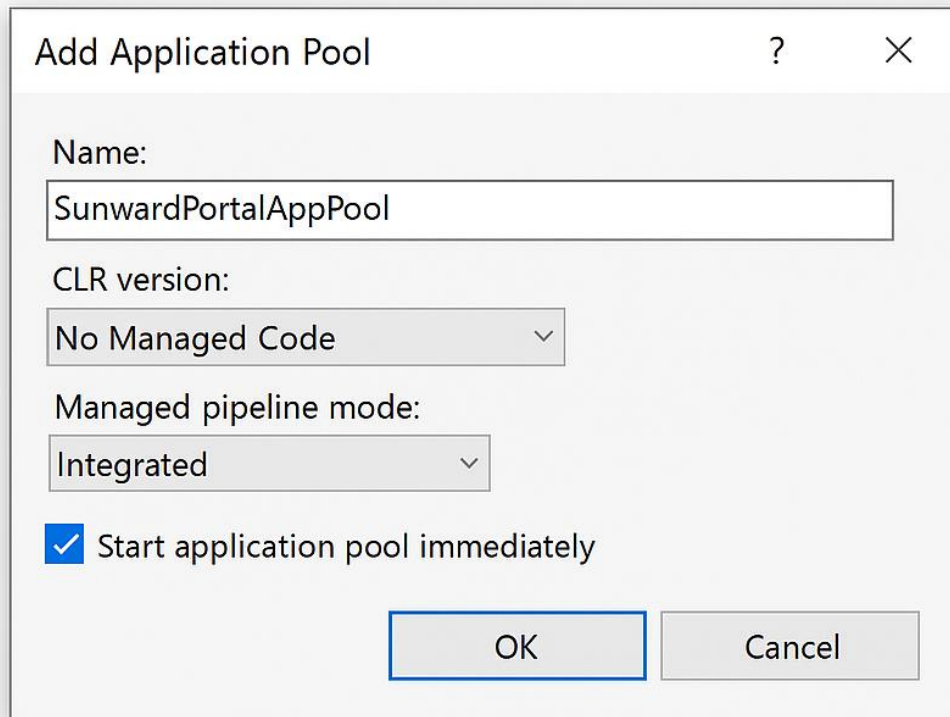
Connections > Application Pools

Application pools are used to group and separate sets of IIS worker processes that share the same configuration. By separating applications, you achieve the level of application isolation required by your environment.

| + Add Application Pool... | Set Application Pool Defaults... | <input type="text" value="Filter"/> | | |
|---|--|-------------------------------------|-----------------------|-------------|
| Name ^ | Status | .NET CLR Version | Managed Pipeline Mode | Start Auton |
| SunwardPortalAppPool | Started | No Managed Code | Integrated | True |
| .NET v4.5 | Started | v4.0 | Classic | True |
| .NET v4.5 Classic | Started | v4.0.30319 | Classic | True |
| ASP.NET v4.0 | Started | v4.0.30319 | Classic | True |
| ASP.NET v4.0 Classic | Started | v4.0 | Integrated | True |
| ASP.NET v4.0 Classic | Started | v4.0.30319 | Classic | True |

Filter ably ssearch terms.

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Add Application Pool

Name:
SunwardPortalAppPool

CLR version:
No Managed Code

Managed pipeline mode:
Integrated

☒ Start application pool immediately

OK Cancel

Import-Module WebAdministration

New-WebAppPool -Name "SunwardPortalAppPool"

Set-ItemProperty IIS:\AppPools\SunwardPortalAppPool -Name processModel.identityType -Value "ApplicationPoolIdentity"

If .NET Framework site:

```
Set-ItemProperty IIS:\AppPools\SunwardPortalAppPool -Name managedRuntimeVersion -Value "v4.0"
```

4. Create Physical Folder & Copy Files

1. On the server create folder: `C:\inetpub\wwwroot\SunwardPortal`.
2. Copy your published web app files there (index, web.config, bin, wwwroot, etc). For ASP.NET Core, ensure the `web.config` is present (or configure reverse-proxy).
3. **Tip:** If files are coming from CI, you can use FTP, SMB, or copy over via RDP.

d Application Pool



Name:

SunwardPortalAppPool

NET CLR version:

Managed pipeline mode:

No Managed Code

Integrated

☒ Start application pool immediately

OK

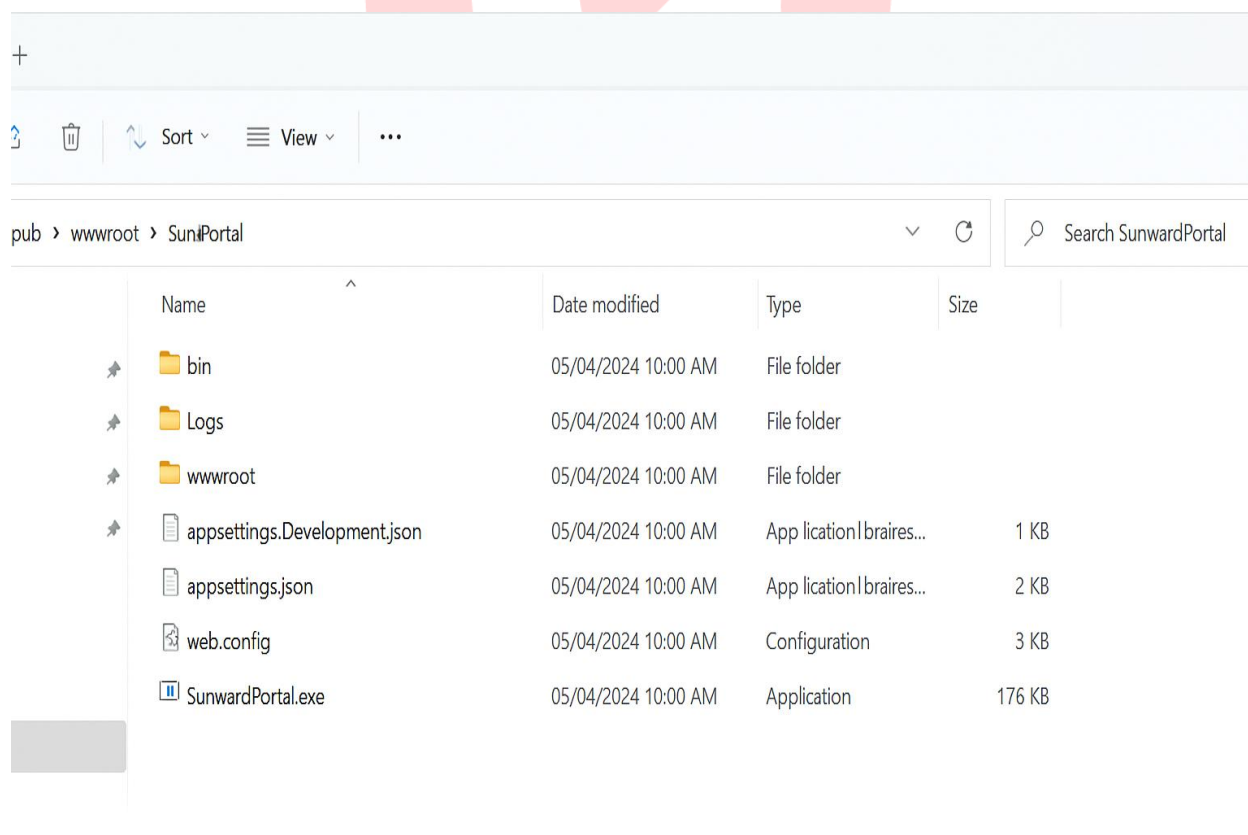
Cancel

5. Create Site in IIS

5.1. In IIS Manager → right-click Sites → Add Website

Site name: SunwardPortal

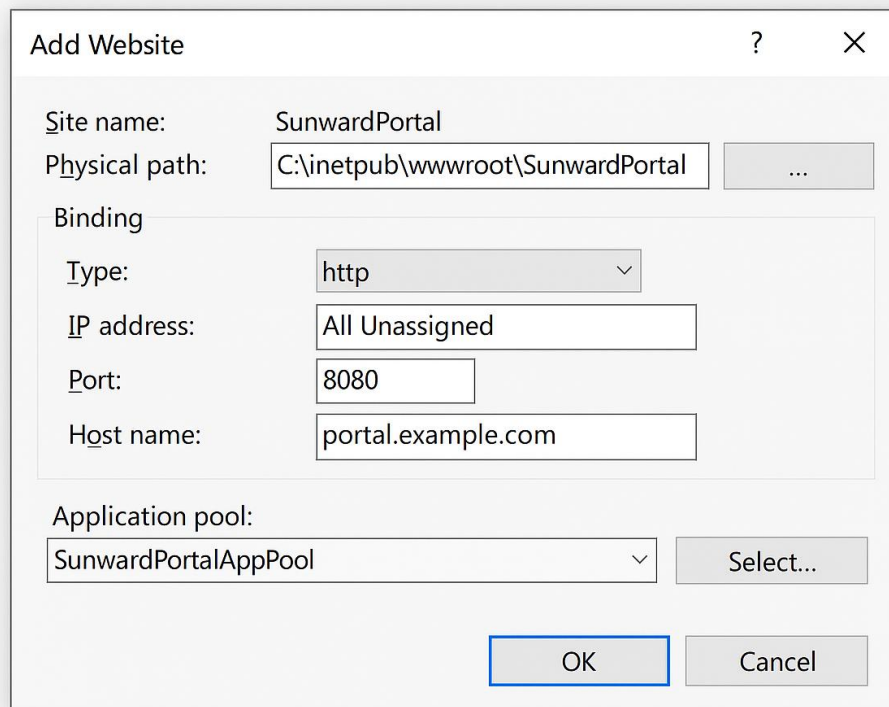
1. Physical path: C:\inetpub\wwwroot\SunwardPortal
2. Application pool: SunwardPortalAppPool
3. Binding:
 - Type: http (or https)
 - IP address: All Unassigned (or specific)
 - Port: 8080
 - Host name: portal.example.com
 - Click **OK**.



5.2.(Optional) Create Virtual Directory / Application under an existing site

Expand Sites → select the site (e.g., Default Web Site) → right-click → **Add Application** (or Add Virtual Directory).

1. Alias: SunwardPortal
2. Physical path: C:\inetpub\wwwroot\SunwardPortal
3. Application pool: SunwardPortalAppPool
 - Click **OK**.



Add Website

Site name: SunwardPortal

Physical path: C:\inetpub\wwwroot\SunwardPortal ...

Binding

Type: http

IP address: All Unassigned

Port: 8080

Host name: portal.example.com

Application pool: SunwardPortalAppPool Select...

OK Cancel

6. Set Folder Permissions (important)

1. • Right click C:\inetpub\wwwroot\SunwardPortal → **Properties** → **Security** → **Edit** → **Add**.

2. • Add user: IIS AppPool\SunwardPortalAppPool and give **Read & execute, List folder contents, Read**. Add write only if app writes to folder.
3. • Click OK.

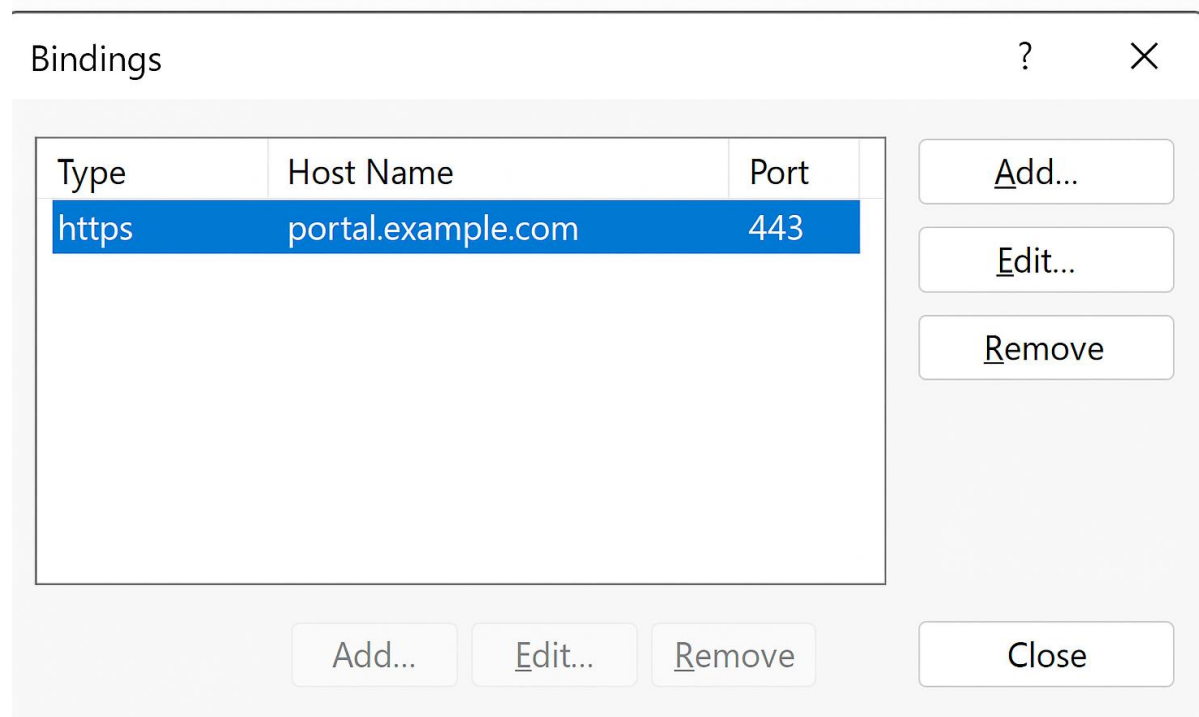
7. Bind Domain & (Optional) Configure HTTPS

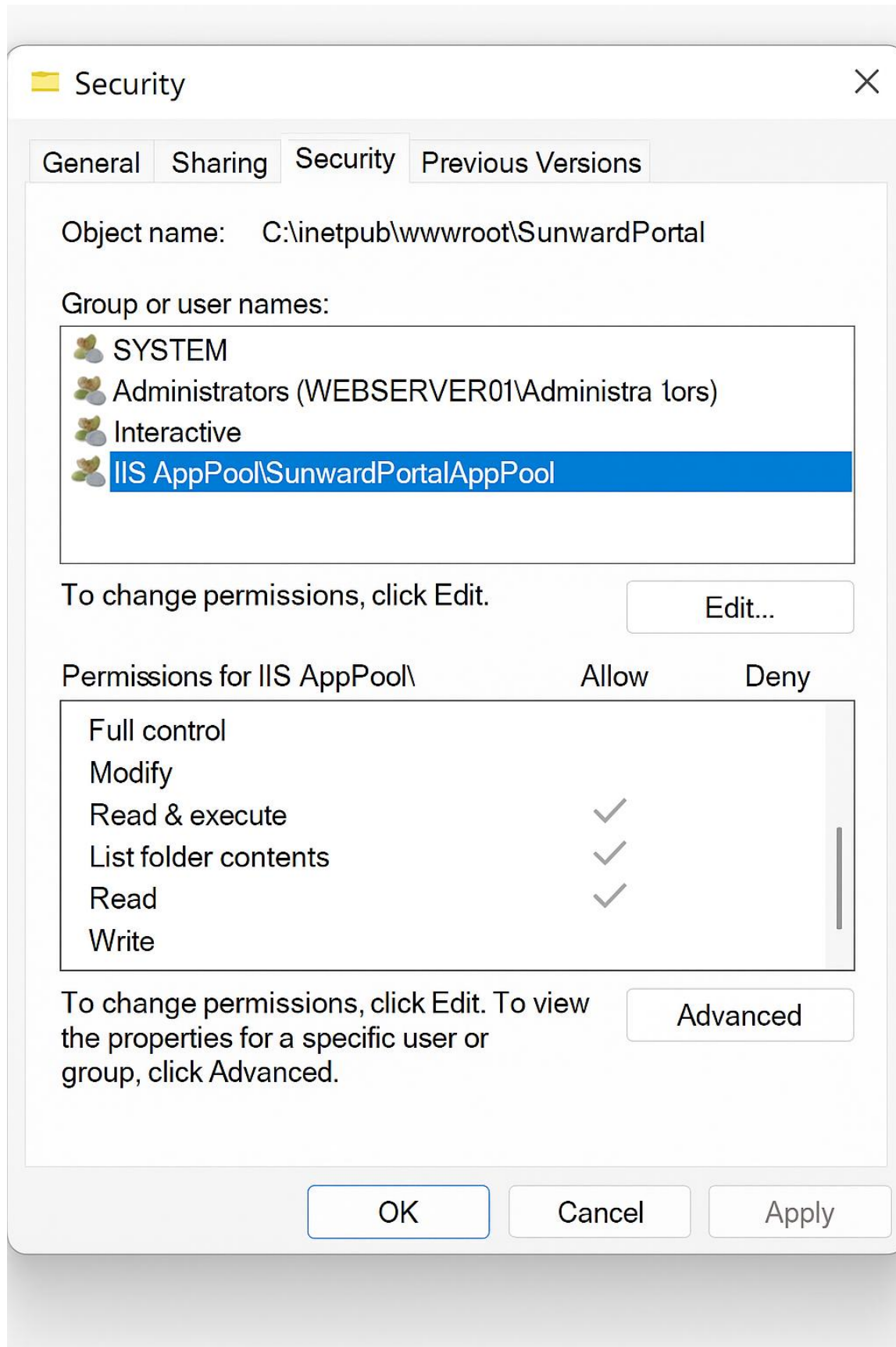
For HTTP:

Site binding set in step 4. Ensure DNS portal.example.com points to server IP.

For HTTPS:

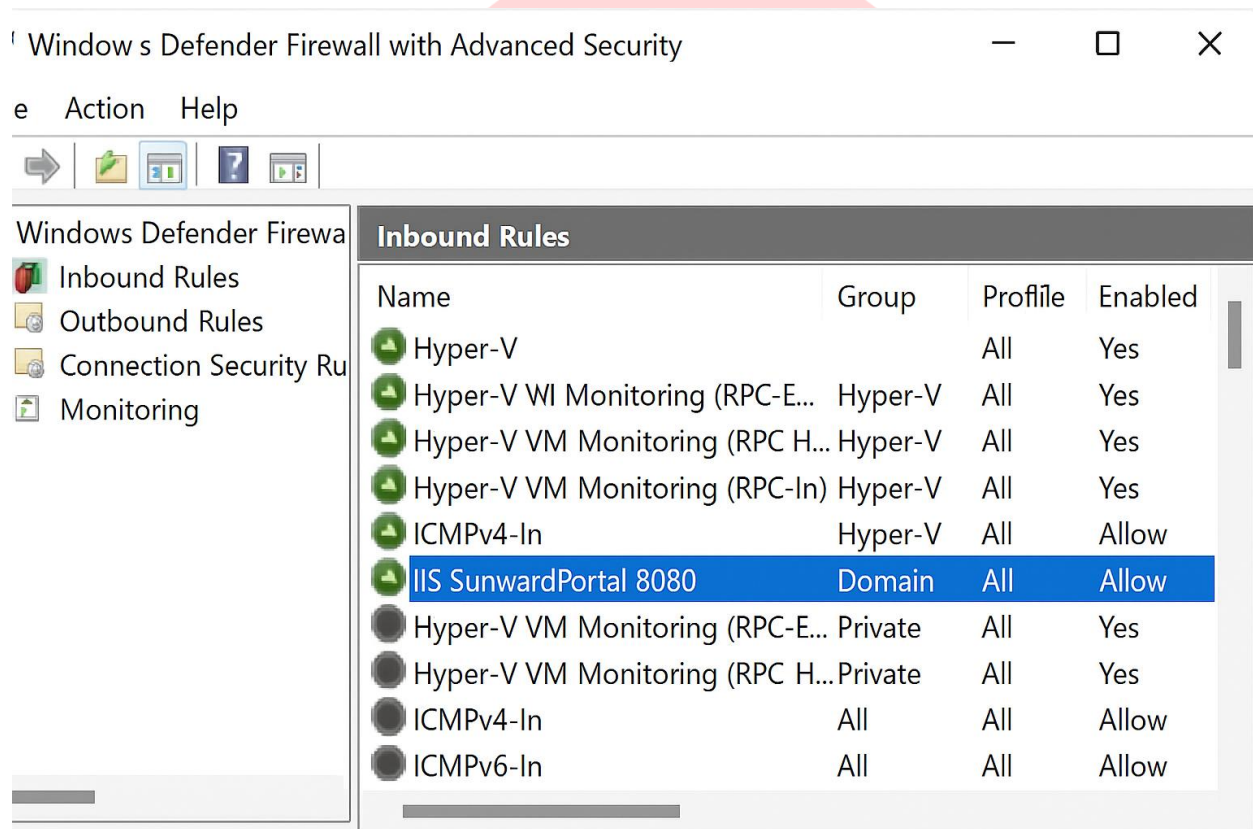
1. Obtain certificate (from CA or internal).
2. In **IIS Manager** select the site → **Bindings** → **Add** → Type: https → IP/Host/Port 443 → select SSL cert.
3. If using a firewall, open port 443.





8. Application Settings & web.config (for ASP.NET / .NET Core)

1. Ensure `web.config` exists and has correct `processPath` & arguments for ASP.NET Core (if using ANCM module).
2. For connection strings or app settings, either put them in `appsettings.Production.json` or App Settings in Azure / environment variables. For IIS, you can set environment variables in system settings or in `web.config`.



9. Firewall / Network

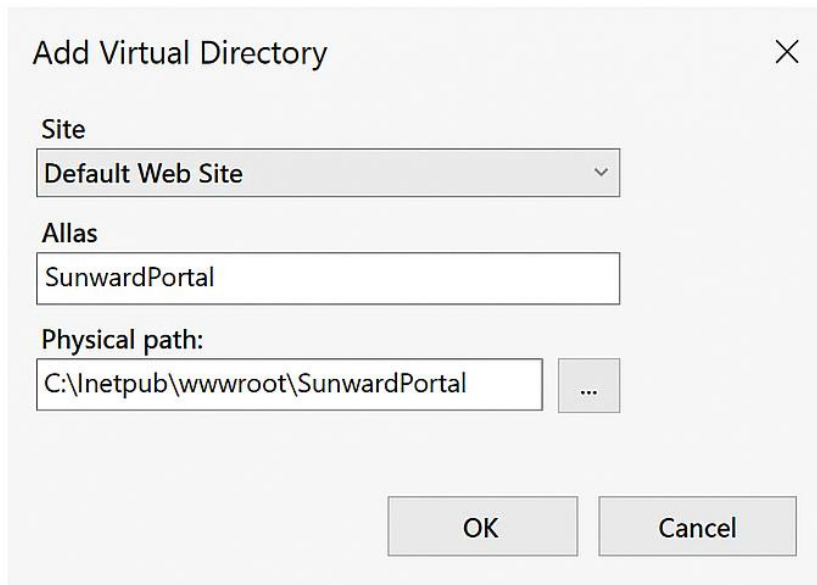
1. Open port 8080 (or port used) on server firewall and network firewall.
2. Windows firewall example (PowerShell):

fig - Notepad

Format View Help

```
:Core>  
>NetCore processPath=".\\SunwadPortal.exe" stdoutLogEnabled="false"  
:outLogFile=".logs\\slogs\\stdout" hostingModel="inprocess">  
/ironmentVariables>  
:environmentVariable 'ASPNETCORE_ENVIRONMENT', value="Production />  
>inetCore>  
>NetCore>
```

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Add Virtual Directory

Site
Default Web Site

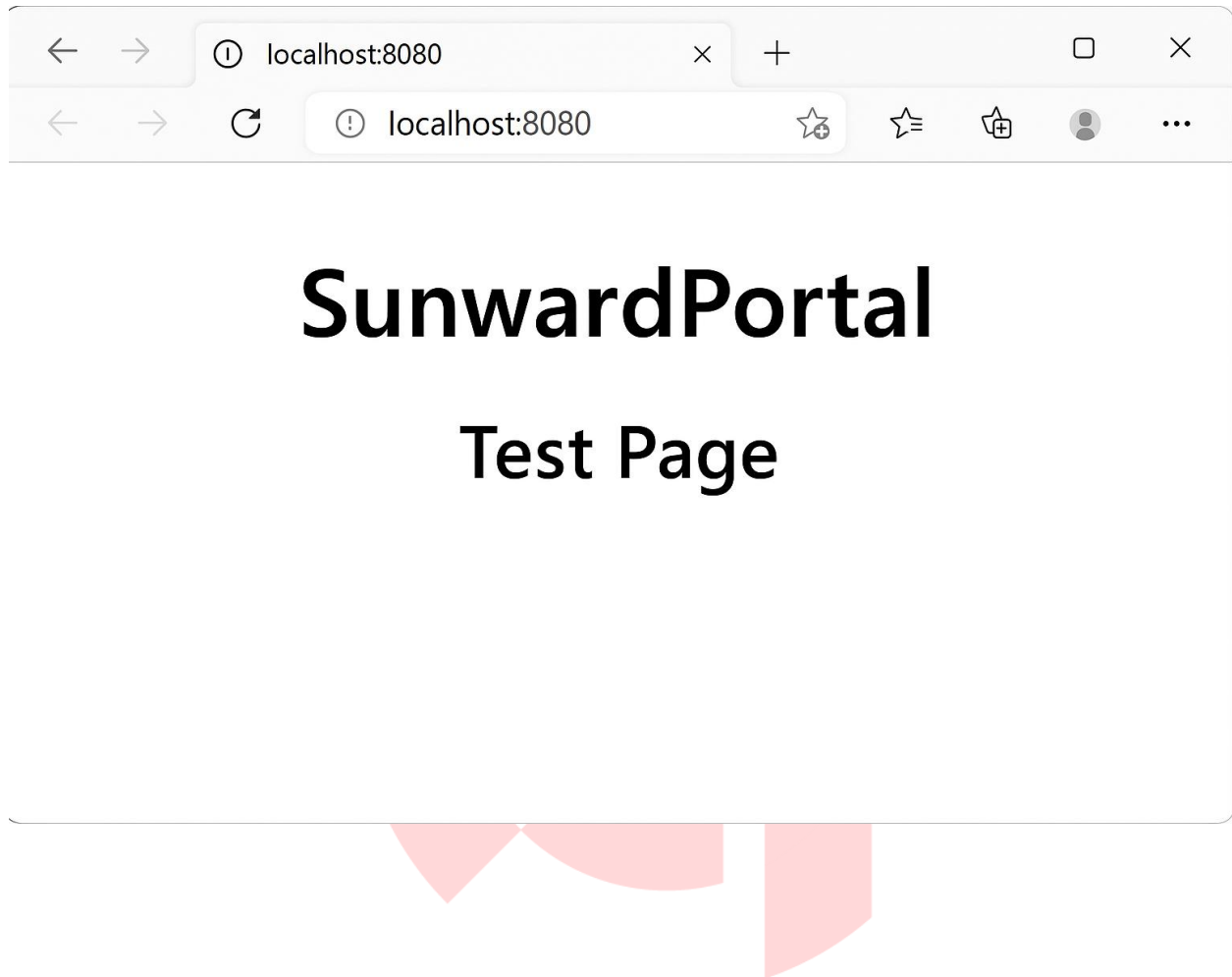
Alias
SunwardPortal

Physical path:
C:\inetpub\wwwroot\SunwardPortal

OK Cancel

10. Start / Restart & Smoke Test

1. In IIS Manager select site → **Start** (if not started) or **Restart**.
2. From server browser: `http://localhost:8080` (or `http://portal.example.com:8080`)
3. From remote machine: `http://portal.example.com:8080`
4. Check for expected home page and verify logs (Event Viewer or application logs).



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trator: Windows PowerShell

s/Administrator>.deploy_sunward.ps1

ion Process

ory: C:\inetpub\wwwroot\SunwardPortal

| LastWriteTime | Length | Name |
|-------------------|--------|---------------|
| 4/10/2024 6:23 PM | | SunwardPortal |

ion Process

| State | Applications |
|-------|--------------|
| ----- | |

rlertalcldAppPool

te: (IIS Application Pool\SunwardPortalAppPool)

tion pool Initialized (No Managed Code)

plicationHost\Sites): Site initialized dk(#1)

| ID | State | Physical Path | Bindings |
|----|---------|----------------------------------|----------------------|
| 1 | Started | C:\inetpub\wwwroot\SunwardPortal | → p 8080 (http/1.1*) |

ion Process

| DisplayName | Enabled | Profile | Direction | Action |
|-----------------|---------|---------|-------------|--------|
| 5 SunwardPortal | 8080 | True | Any Inbound | Allow |

s/Administrator>

11. Common Issues & Troubleshooting

1. **HTTP 500** → check web.config and application logs. Turn on stdoutLog temporarily for ASP.NET Core.
2. **HTTP 502 (Bad Gateway)** → ANCM could not start .NET Core process — check event log.
3. **Permission denied errors** → re-check folder ACLs and app pool identity.
4. **Host name binding not working** → ensure DNS is properly pointed and port is open.
5. **SSL handshake error** → certificate mismatch, check CN/SAN and certificate chain.

12. Example PowerShell Script (all-in-one, adapt values)

