Installation Guide of Fleet Service Application

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Table of Contents

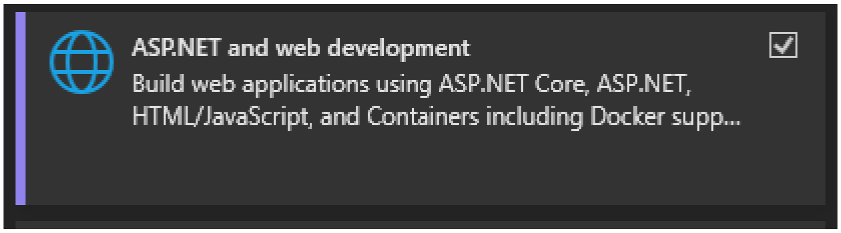
1. Introduction

Welcome to the installation guide for the Fleet Service program! This guide provides step-by-step instructions to help you install and set up the Fleet Service program on your system. The Fleet Service program is designed to streamline and manage the operations of a fleet management service, allowing you to efficiently track and maintain vehicles, manage inspections, and generate insightful reports.

2. Visual Studio Requirements

To run the application in the visual studio you need to have the following Workloads installed in the visual studio.

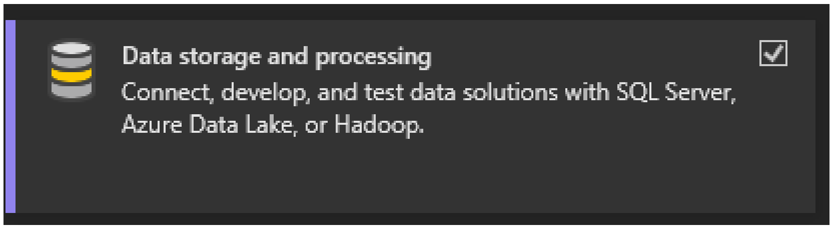
- ASP.NET and web development



ASP.NET and web development ☑

Build web applications using ASP.NET Core, ASP.NET, HTML/JavaScript, and Containers including Docker supp...

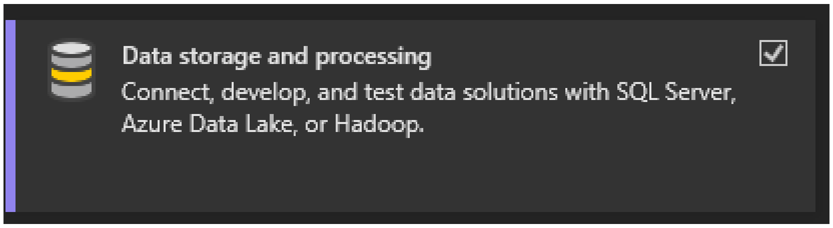
- Data storage and processing



Data storage and processing ☑

Connect, develop, and test data solutions with SQL Server, Azure Data Lake, or Hadoop.

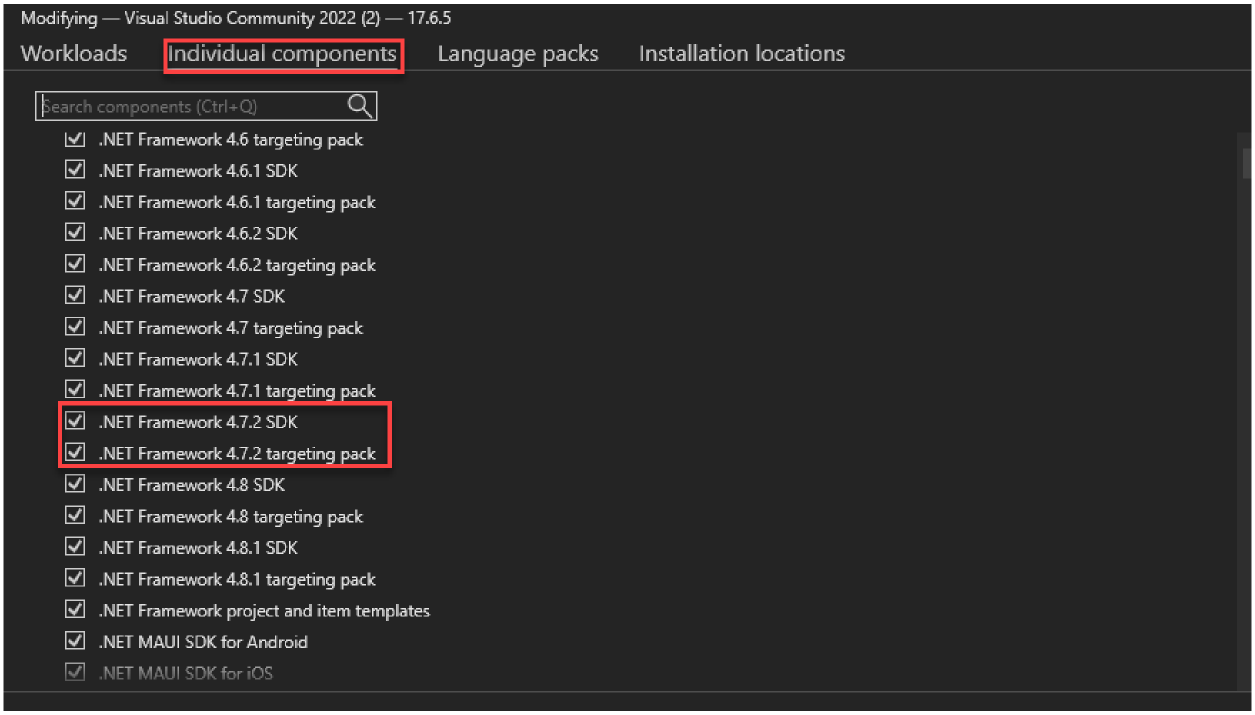
- Data science and analytical application



Data storage and processing ☑

Connect, develop, and test data solutions with SQL Server, Azure Data Lake, or Hadoop.

- .Net Framework 4.7.2 needs to be installed in visual studio to troubleshoot and publish the application through the Microsoft Visual Studio



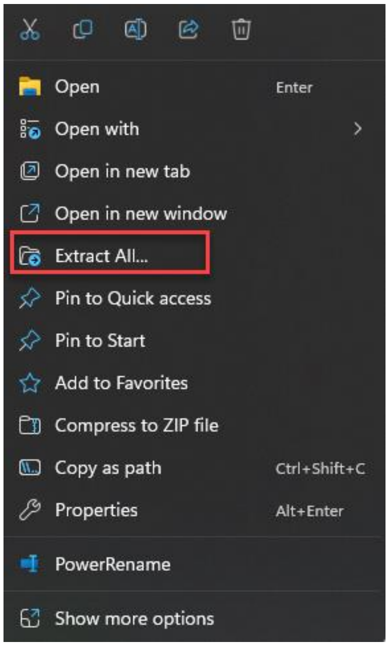
Modifying — Visual Studio Community 2022 (2) — 17.6.5

☑ .NET Framework 4.6 targeting pack
☑ .NET Framework 4.6.1 SDK
☑ .NET Framework 4.6.1 targeting pack
☑ .NET Framework 4.6.2 SDK
☑ .NET Framework 4.6.2 targeting pack
☑ .NET Framework 4.7 SDK
☑ .NET Framework 4.7 targeting pack
☑ .NET Framework 4.7.1 SDK
☑ .NET Framework 4.7.1 targeting pack
☑ .NET Framework 4.7.2 SDK
☑ .NET Framework 4.7.2 targeting pack
☑ .NET Framework 4.8 SDK
☑ .NET Framework 4.8 targeting pack
☑ .NET Framework 4.8.1 SDK
☑ .NET Framework 4.8.1 targeting pack
☑ .NET Framework project and item templates
☑ .NET MAUI SDK for Android
☑ .NET MAUI SDK for iOS

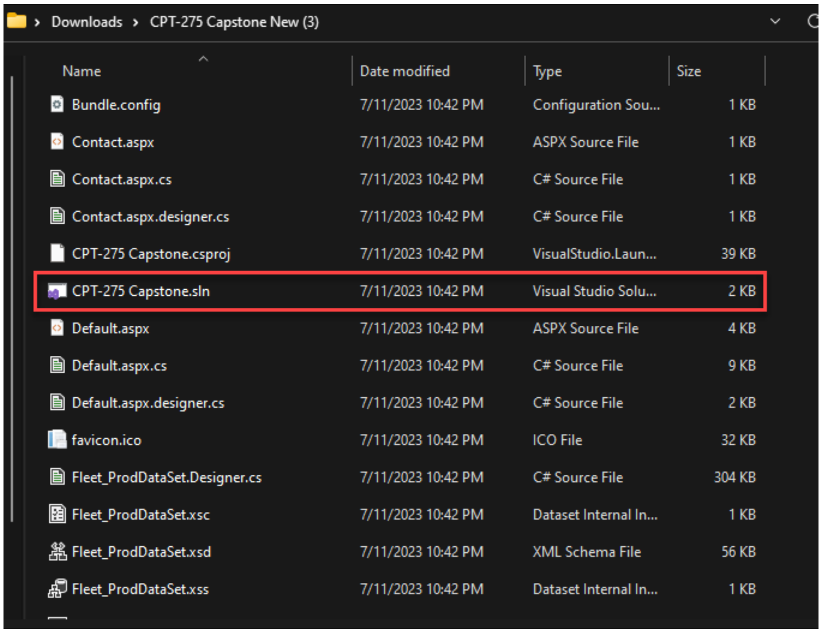
3. Downloading and First Start of the application

Fleet Service application will be provided to the IT department by the SCC students from the Group 2 as a zip package of the application.

1. Once the application is provided to the IT as a zip folder, then the application needs to be unzipped

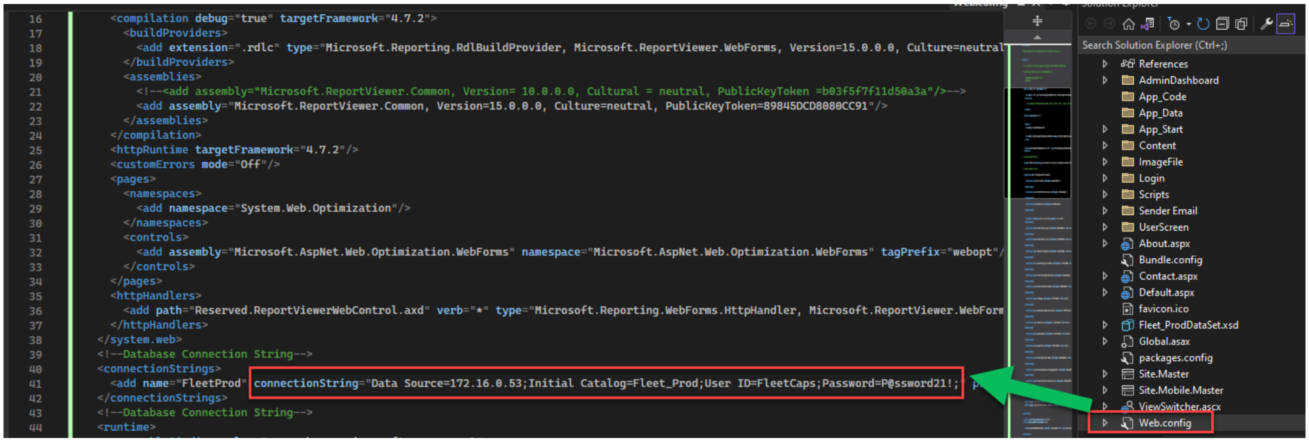


2. Once the application is unzipped, it can be started by clicking the "CPT-275 Capstone.sln"



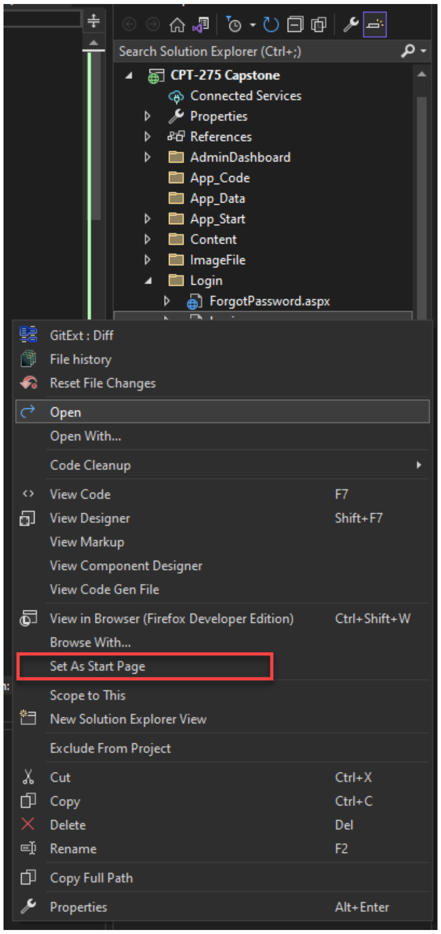
Name	Date modified	Type	Size
Bundle.config	7/11/2023 10:42 PM	Configuration Sou...	1 KB
Contact.aspx	7/11/2023 10:42 PM	ASPX Source File	1 KB
Contact.aspx.cs	7/11/2023 10:42 PM	C# Source File	1 KB
Contact.aspx.designer.cs	7/11/2023 10:42 PM	C# Source File	1 KB
CPT-275 Capstone.csproj	7/11/2023 10:42 PM	VisualStudio.Laun...	39 KB
CPT-275 Capstone.sln	7/11/2023 10:42 PM	Visual Studio Solu...	2 KB
Default.aspx	7/11/2023 10:42 PM	ASPX Source File	4 KB
Default.aspx.cs	7/11/2023 10:42 PM	C# Source File	9 KB
Default.aspx.designer.cs	7/11/2023 10:42 PM	C# Source File	2 KB
favicon.ico	7/11/2023 10:42 PM	ICO File	32 KB
Fleet_ProdDataSet.Designer.cs	7/11/2023 10:42 PM	C# Source File	304 KB
Fleet_ProdDataSet.xsc	7/11/2023 10:42 PM	Dataset Internal In...	1 KB
Fleet_ProdDataSet.xsd	7/11/2023 10:42 PM	XML Schema File	56 KB
Fleet_ProdDataSet.xss	7/11/2023 10:42 PM	Dataset Internal In...	1 KB

3. Once the application is opened in the Microsoft Visual Studio, the first thing that needs to be done in order to start the application is to point the application the new SQL server, with the new SQL database.
Fields that needs to be modified are: ConnectionString, Initial Catalog, User ID, Password
These are the credentials that are used to access the SQL server and the database that is on.



```
      <compilation debug="true" targetFramework="4.7.2">
        <buildProviders>
          <add extension=".rdlc" type="Microsoft.Reporting.RdlBuildProvider, Microsoft.ReportViewer.WebForms, Version=15.0.0.0, Culture=neutral
        </buildProviders>
        <assemblies>
          <!--<add assembly="Microsoft.ReportViewer.Common, Version= 10.0.0.0, Cultural = neutral, PublicKeyToken =b03f5f7f11d50a3a"/>-->
          <add assembly="Microsoft.ReportViewer.Common, Version=15.0.0.0, Culture=neutral, PublicKeyToken=89845DCD8080CC91"/>
        </assemblies>
      </compilation>
      <httpRuntime targetFramework="4.7.2"/>
      <customErrors mode="Off"/>
      <pages>
        <namespaces>
          <add namespace="System.Web.Optimization"/>
        </namespaces>
        <controls>
          <add assembly="Microsoft.AspNet.Web.Optimization.WebForms" namespace="Microsoft.AspNet.Web.Optimization.WebForms" tagPrefix="webopt"/
        </controls>
      </pages>
      <httpHandlers>
        <add path="Reserved.ReportViewerWebControl.axd" verb="*" type="Microsoft.Reporting.WebForms.HttpHandler, Microsoft.ReportViewer.WebForm
      </httpHandlers>
    </system.web>
    <!--Database Connection String-->
    <connectionStrings>
      <add name="FleetProd" connectionString="Data Source=172.16.0.53;Initial Catalog=Fleet_Prod;User ID=FleetCaps;Password=P@ssword21!;"
    </connectionStrings>
    <!--Database Connection String-->
    <runtime>
```

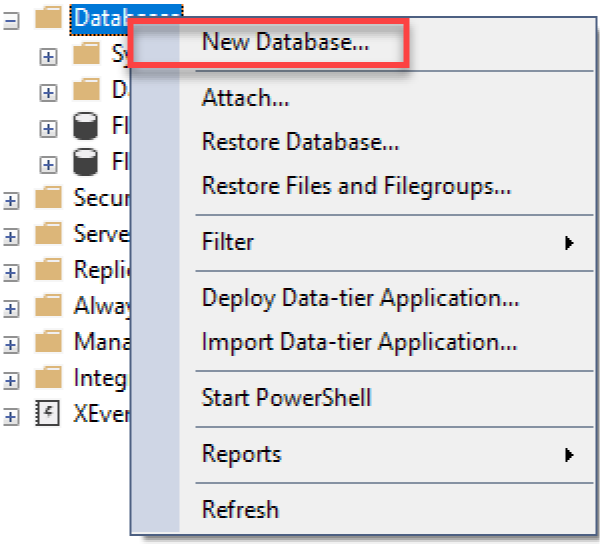
Second, set the Login page under the Login folder as a Start Page.



4. Setting up a new database to run the application on

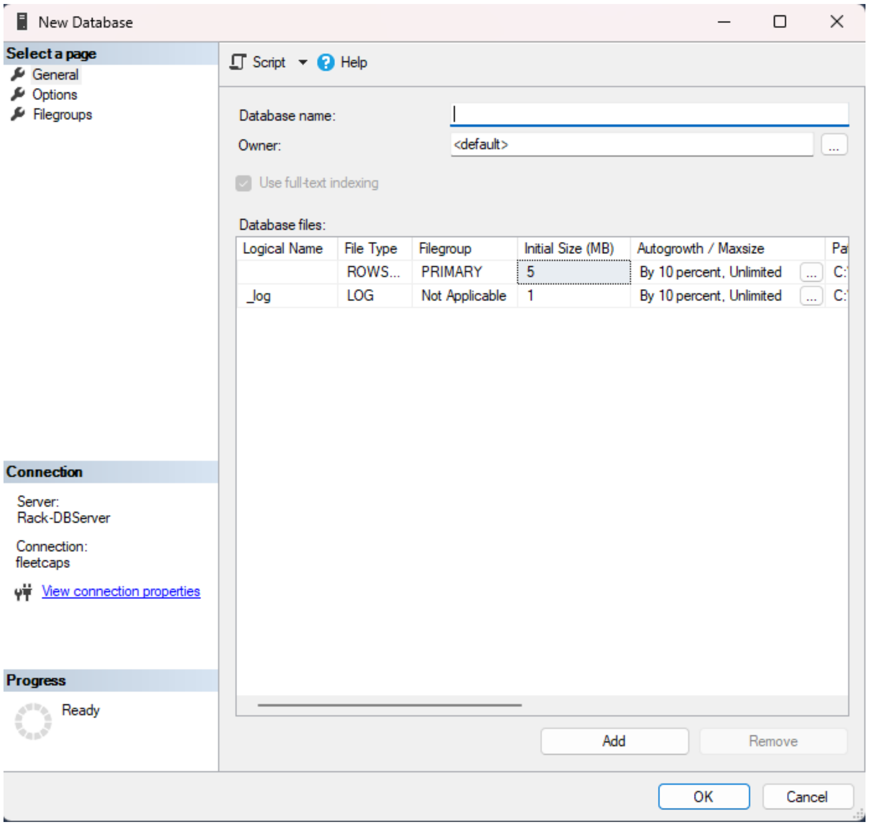
In order to run the application on the server the SQL database needs to be created with the correct table structure and reports to use to run the application.

To create a new database in the Microsoft SQL Server Management Studio, you would need to connect to the Database server and right click the "Databases" folder.



On the New Database prompt, you would need to enter a database name that will be used and give an access to the users that needs to have access to the database.

Application does not require any accounts to have access to the database



Database name:

Owner: <default>

Database files:

Logical Name	File Type	Filegroup	Initial Size (MB)	Autogrowth / Maxsize	Pa
	ROWS...	PRIMARY	5	By 10 percent, Unlimited	C:
_log	LOG	Not Applicable	1	By 10 percent, Unlimited	C:

Server:
Rack-DBServer

Connection:
fleetcaps

Ready

Once the database is created you would need to use the Schema script that was provided by the Lead Programmer of the application.

5. Schema Script

```
--Create a vehicle table
CREATE TABLE vehicle (
    vehicle_id int identity (1,1) primary key,
    vehicle_year varchar(50) NOT NULL,
    vehicle_make varchar(255) not null,
    vehicle_model varchar (50) not null,
    vehicle_number char (20),
    vehicle_mileage char (50),
    vehicle_plate char (20),
    vehicle_no_default char (20),
);
--Users table
CREATE TABLE users(
    users_last_name varchar(50) NOT NULL,
    users_first_name varchar(50) NOT NULL,
    users_telephone char(10) NULL,
    users_email varchar(50) NULL,
    users_password char(20) NULL,
    users_DL char(20) NULL,
    users_DL_state [char](20) NULL,
    users_type char(20) NULL,
    vehicle_id int NULL,
    user_id int IDENTITY(1,1) NOT NULL,
PRIMARY KEY CLUSTERED
(
    [user_id] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF)
ON [PRIMARY]
) ON [PRIMARY]
GO
--Inspection table
CREATE TABLE inspection(
    inspection_id int IDENTITY(1,1) NOT NULL,
    inspection_beginning_mileage decimal(18, 0) NOT NULL,
    inspection_ending_mileage decimal(18, 0) NOT NULL,
    inspection_total_mileage_driven decimal(18, 0) NULL,
    inspection_last_oil_change_date date NULL,
    inspection_oil_change_due date NULL,
    inspection_interval varchar(10) NULL,
    inspection_last_tire_rotation date NULL,
    inspection_tires_rotation_due date NULL,
    inspection_tires_pressure decimal(18, 0) NULL,
    vehicle_number int NULL,
    inspection_additional_notes varchar(250) NULL,
    trip_fluid_level varchar(10) NULL,
    battery_good varchar(10) NULL,
    gauge_working varchar(10) NULL,
    clean_cab varchar(10) NULL,
    clean_exterior varchar(10) NULL,
    inspection_date date NULL,
PRIMARY KEY CLUSTERED
(
    [inspection_id] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF,
ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF)
ON [PRIMARY]
) ON [PRIMARY]
GO

--Trip table
CREATE TABLE trip(
    trip_date date NULL,
    trip_beginning_mileage char(20) NOT NULL,
    trip_destination varchar(100) NOT NULL,
    trip_purpose varchar(100) NOT NULL,
    trip_ending_mileage varchar(20) NOT NULL,
    trip_total_miles char(20) NULL,
    vehicle_id varchar(150) NULL,
    user_id int NULL
);

--**Reports-----
--Inspection Report--------
/****** Object:  StoredProcedure [dbo].[inspection_report]    Script Date:
7/11/2023 9:58:03 PM ******/
/****** Object:  StoredProcedure [dbo].[inspection_report]    Script Date:
7/12/2023 10:57:53 PM ******/
SET ANSI_NULLS ON
GO

SET QUOTED_IDENTIFIER ON
GO

CREATE procedure inspection_report
(@beginning_date date, @ending_date date, @selected_vehicle int=null) as
if @selected_vehicle is null and @beginning_date is not null and @ending_date  is
not null
```

```
begin
select
cast (v.vehicle_year+ ' '+v.vehicle_make+ ' ' +v.vehicle_model+ ' '
+v.vehicle_plate as varchar(50)) 'Vehicle',
i.inspection_beginning_mileage 'Beginning Mileage', i.inspection_ending_mileage
'Ending Mileage',
CONVERT(VARCHAR(10),i.inspection_last_oil_change_date,101) 'Last Oil Change',
CONVERT(VARCHAR(10), i.inspection_oil_change_due,101) 'Oil Change Due',
CONVERT(VARCHAR(10),i.inspection_last_tire_rotation,101) 'Last Tire Change',
CONVERT(VARCHAR(10),i.inspection_tires_rotation_due,101) 'Rotation Due',
i.inspection_tires_pressure 'Tire Pressure', i.inspection_additional_notes
'Additional Notes'
from inspection i join vehicle v on i.vehicle_number=v.vehicle_id
where inspection_date between @beginning_date and @ending_date
order by i.inspection_oil_change_due, inspection_date asc
end

else
begin
select
cast (v.vehicle_year+ ' '+v.vehicle_make+ ' ' +v.vehicle_model+ ' '
+v.vehicle_plate as varchar(50)) 'Vehicle',
i.inspection_beginning_mileage 'Beginning Mileage', i.inspection_ending_mileage
'Ending Mileage',
CONVERT(VARCHAR(10),i.inspection_last_oil_change_date,101) 'Last Oil
Change',CONVERT(VARCHAR(10), i.inspection_oil_change_due,101) 'Oil Change Due',
CONVERT(VARCHAR(10),i.inspection_last_tire_rotation,101) 'Last Tire Change',
CONVERT(VARCHAR(10),i.inspection_tires_rotation_due,101) 'Rotation Due',
i.inspection_tires_pressure 'Tire Pressure', i.inspection_additional_notes
'Additional Notes'
from inspection i join vehicle v on i.vehicle_number=v.vehicle_id
where inspection_date between @beginning_date and @ending_date

and @selected_vehicle=v.vehicle_id
order by i.inspection_oil_change_due, inspection_date asc
end
GO

--Trip Report
/****** Object:  StoredProcedure [dbo].[trip_report_new]    Script Date:
7/12/2023 10:58:37 PM ******/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
```

```
--Trip Date, Trip Destination, Trip Purpose, Trip Total Miles

--ALTER TABLE table_name
--RENAME COLUMN old_name TO new_name;

--ALTER TABLE employee ALTER COLUMN emp_parking_space BIGINT;


--EXEC sp_rename 'trip_report_new.trip_date', 'Trip Date';

CREATE procedure trip_report_new
(@trip_beginning_date DATETIME, @trip_ending_date DATETIME, @selectd_vehicle INT
= null, @select_user INT = null) AS
if @select_user is null and @selectd_vehicle is null            -- SCENARIO 1:
Date parameters included but No User and no Vehicle parameter
    begin
        print '1'
        select cast(u.users_last_name+', '+u.users_first_name as char(20)) 'Full
Name', CONVERT(VARCHAR(10),t.trip_date,101) 'Trip Date', t.trip_destination 'Trip
Destination',
        t.trip_purpose 'Trip Purpose', t.trip_total_miles 'Trip Total Miles',
cast (v.vehicle_year+ ' '+v.vehicle_make+ ' ' +v.vehicle_model+ ' '
+v.vehicle_plate as varchar(50)) 'Vehicle'
        from trip t join vehicle v on t.vehicle_id=v.vehicle_id join users u on
(t.user_id = u.user_id)
        where trip_date between @trip_beginning_date and  @trip_ending_date
        order by trip_date asc
    end
else if @select_user is null and @selectd_vehicle is NOT null   -- SCENARIO 2:
Date and Vehicle parameters included but No User parameter
    begin
        print '2'
        select cast(u.users_last_name+', '+u.users_first_name as char(20)) 'Full
Name',CONVERT(VARCHAR(10), t.trip_date,101) 'Trip Date', t.trip_destination 'Trip
Destination',
        t.trip_purpose 'Trip Purpose', t.trip_total_miles'Trip Total Miles', cast
(v.vehicle_year+ ' '+v.vehicle_make+ ' ' +v.vehicle_model+ ' ' +v.vehicle_plate
as varchar(50)) 'Vehicle'
        from trip t join vehicle v on t.vehicle_id=v.vehicle_id join users u on
(t.user_id = u.user_id)
        where trip_date between @trip_beginning_date and  @trip_ending_date and
@selectd_vehicle = t.vehicle_id
        order by trip_date asc
    end
```

```
else if @select_user is not null and @selectd_vehicle is null   --  SCENARIO 3:
Date and User parameters included but No Vehicle
    begin
        print '3'
        select cast(u.users_last_name+', '+u.users_first_name as char(20)) 'Full
Name',CONVERT(VARCHAR(10), t.trip_date,101) 'Trip Date', t.trip_destination 'Trip
Destination',
        t.trip_purpose 'Trip Purpose', t.trip_total_miles 'Trip Total Miles',
cast (v.vehicle_year+ ' '+v.vehicle_make+ ' ' +v.vehicle_model+ ' '
+v.vehicle_plate as varchar(50)) 'Vehicle'
        from trip t join vehicle v on t.vehicle_id=v.vehicle_id join users u on
(t.user_id = u.user_id)
        where trip_date between @trip_beginning_date and  @trip_ending_date and
@select_user = u.user_id
        order by trip_date asc
    end
    else   -- SCENARIO 4: Both User and Vehicle parameters included with Date
parameters
        begin
        print '4'
        select cast(u.users_last_name+', '+u.users_first_name as char(20)) 'Full
Name',CONVERT(VARCHAR(10), t.trip_date,101) 'Trip Date', t.trip_destination 'Trip
Destination',
        t.trip_purpose 'Trip Purpose', t.trip_total_miles 'Trip Total Miles',
cast (v.vehicle_year+ ' '+v.vehicle_make+ ' ' +v.vehicle_model+ ' '
+v.vehicle_plate as varchar(50)) 'Vehicle'
        from trip t join vehicle v on t.vehicle_id=v.vehicle_id join users u on
(t.user_id = u.user_id)
        where @select_user = u.user_id and @selectd_vehicle = t.vehicle_id and
trip_date between @trip_beginning_date and  @trip_ending_date
        order by trip_date asc
end

GO
```

6. SMTP Modification (Sender Email)

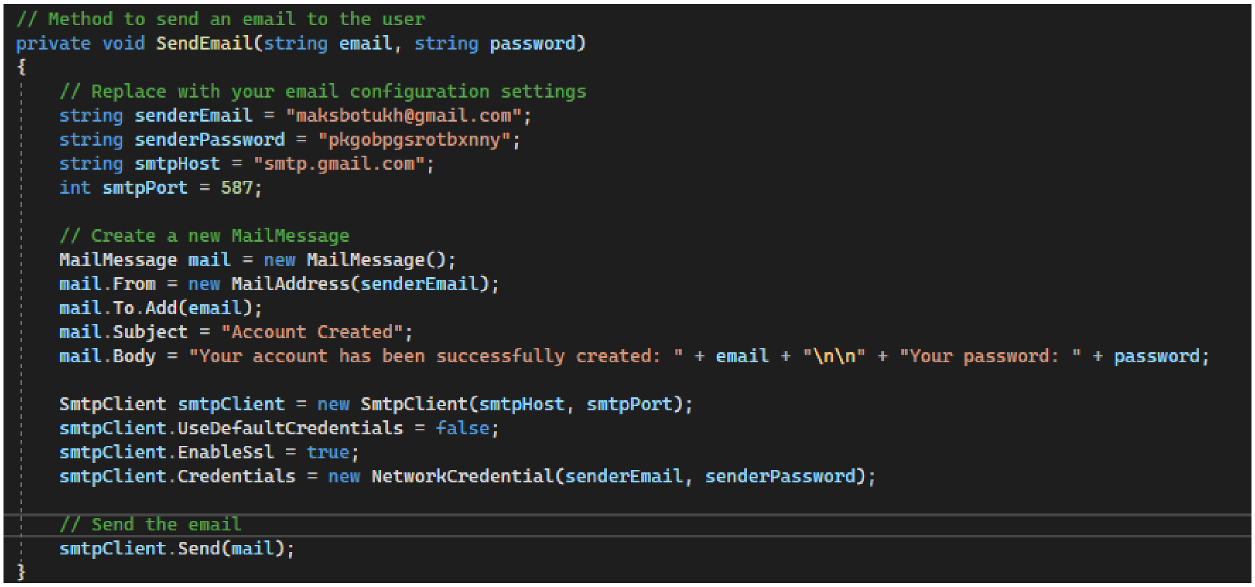
To modify the sender email from the application, you would need to find the SendEmail statements through the application, which are located in the following screens of the application:

- AdminDashboard Folder:
  - AddUser.aspx.cs

- Login Folder

- ForgotPassword.aspx.cs
- Register.aspx.cs

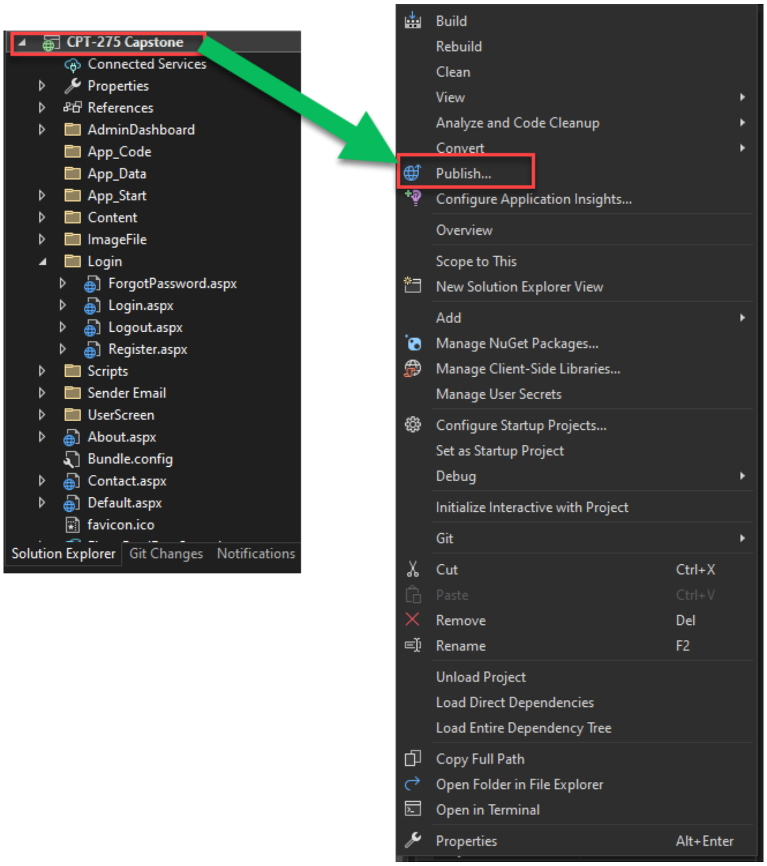
You will see the following statements in which you will need to enter the senderEmail, Senderpassword(password of the SMTP email to allow send out an emails), SmtpHost, and SMTP Port.



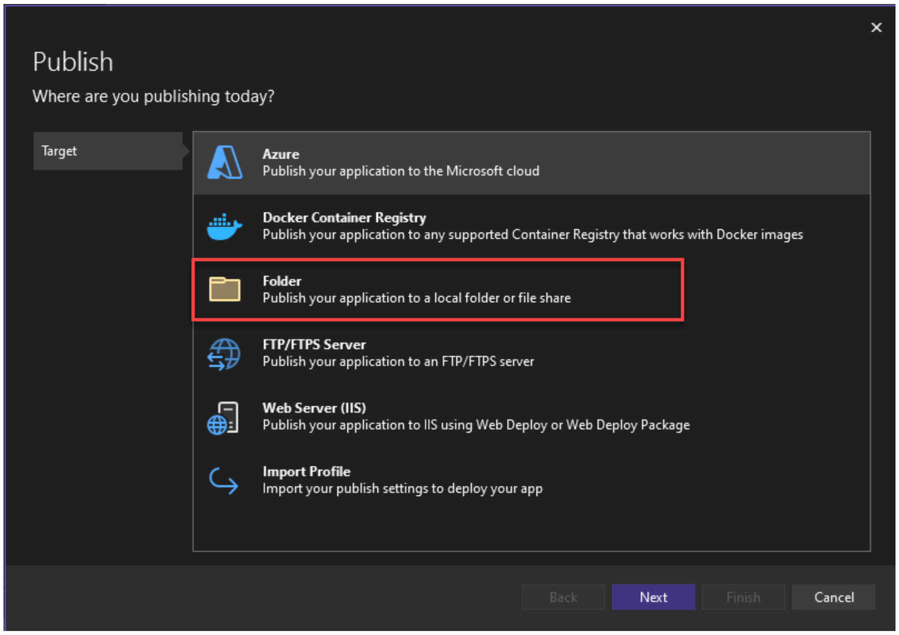
```
// Method to send an email to the user
private void SendEmail(string email, string password)
{
    // Replace with your email configuration settings
    string senderEmail = "maksbotukh@gmail.com";
    string senderPassword = "pkgobpgsrotbxnny";
    string smtpHost = "smtp.gmail.com";
    int smtpPort = 587;

    // Create a new MailMessage
    MailMessage mail = new MailMessage();
    mail.From = new MailAddress(senderEmail);
    mail.To.Add(email);
    mail.Subject = "Account Created";
    mail.Body = "Your account has been successfully created: " + email + "\n\n" + "Your password: " + password;

    SmtpClient smtpClient = new SmtpClient(smtpHost, smtpPort);
    smtpClient.UseDefaultCredentials = false;
    smtpClient.EnableSsl = true;
    smtpClient.Credentials = new NetworkCredential(senderEmail, senderPassword);

    // Send the email
    smtpClient.Send(mail);
}
```

7. Publish the project and promoting on the server

To publish the project from the visual studio you would need to right click the “CPT-275 Capstone” project in the Microsoft Visual Studio and click on Publish.



Once you clicked on the Publish button, you will select to publish to the Folder and point the location of where the folder will be located on your computer.


Publish

Where are you publishing today?

Azure
Publish your application to the Microsoft cloud

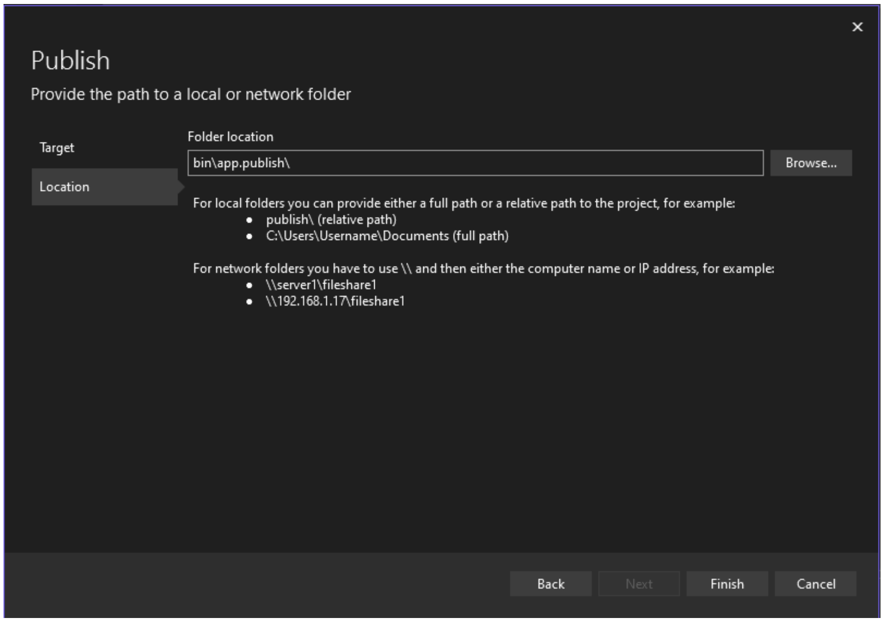
Docker Container Registry
Publish your application to any supported Container Registry that works with Docker images

Folder
Publish your application to a local folder or file share

FTP/FTPS Server
Publish your application to an FTP/FTPS server

Web Server (IIS)
Publish your application to IIS using Web Deploy or Web Deploy Package

Import Profile
Import your publish settings to deploy your app



Publish

Provide the path to a local or network folder

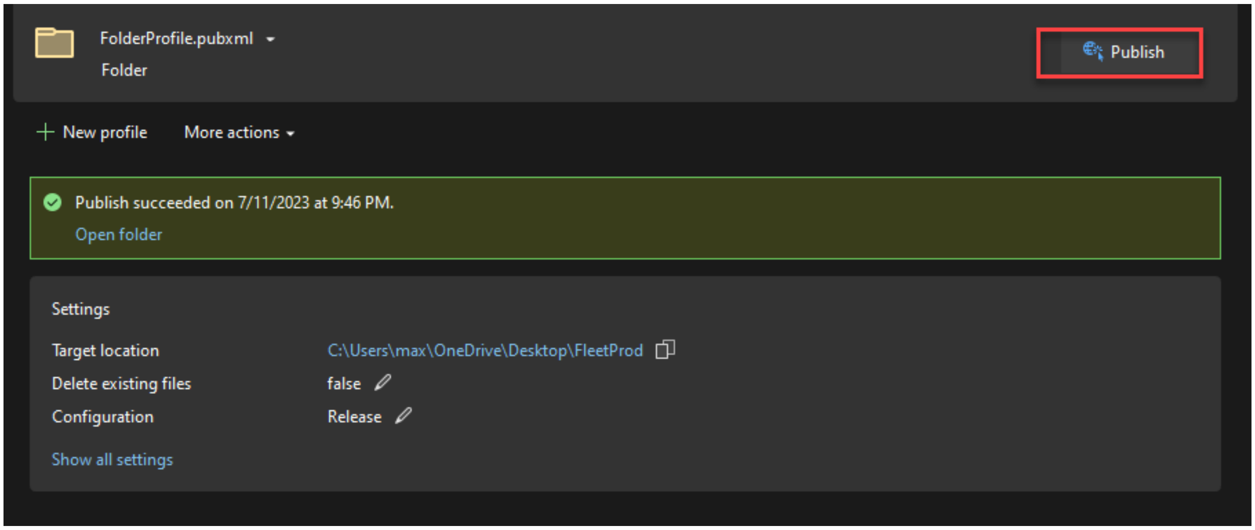
Folder location: bin\app.publish\

For local folders you can provide either a full path or a relative path to the project, for example:

- publish\ (relative path)
- C:\Users\Username\Documents (full path)

For network folders you have to use \\ and then either the computer name or IP address, for example:

- \\server1\fileshare1
- \\192.168.1.17\fileshare1

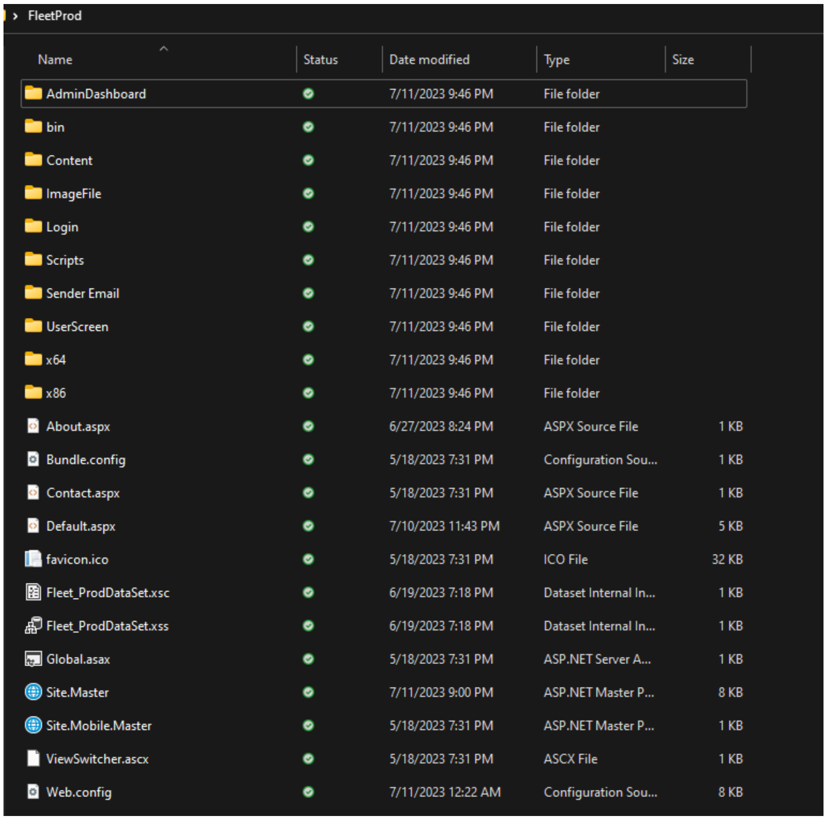


Publish succeeded on 7/11/2023 at 9:46 PM.

Settings

Target location	C:\Users\max\OneDrive\Desktop\FleetProd
Delete existing files	false
Configuration	Release

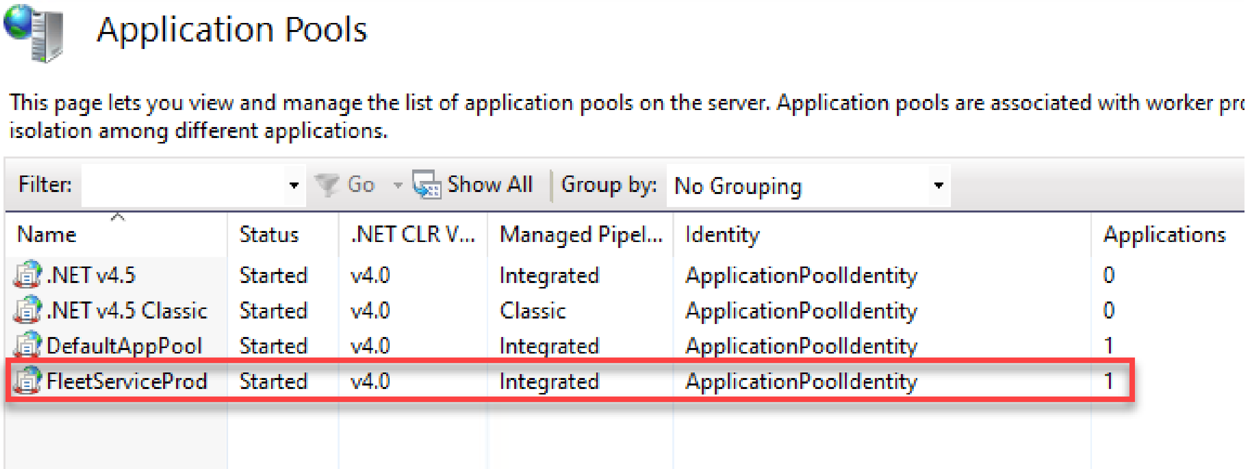
Once the publication is completed, the application can be found in the destination folder.



Name	Status	Date modified	Type	Size
AdminDashboard	✓	7/11/2023 9:46 PM	File folder	
bin	✓	7/11/2023 9:46 PM	File folder	
Content	✓	7/11/2023 9:46 PM	File folder	
ImageFile	✓	7/11/2023 9:46 PM	File folder	
Login	✓	7/11/2023 9:46 PM	File folder	
Scripts	✓	7/11/2023 9:46 PM	File folder	
Sender Email	✓	7/11/2023 9:46 PM	File folder	
UserScreen	✓	7/11/2023 9:46 PM	File folder	
x64	✓	7/11/2023 9:46 PM	File folder	
x86	✓	7/11/2023 9:46 PM	File folder	
About.aspx	✓	6/27/2023 8:24 PM	ASPX Source File	1 KB
Bundle.config	✓	5/18/2023 7:31 PM	Configuration Sou...	1 KB
Contact.aspx	✓	5/18/2023 7:31 PM	ASPX Source File	1 KB
Default.aspx	✓	7/10/2023 11:43 PM	ASPX Source File	5 KB
favicon.ico	✓	5/18/2023 7:31 PM	ICO File	32 KB
Fleet_ProdDataSet.xsc	✓	6/19/2023 7:18 PM	Dataset Internal In...	1 KB
Fleet_ProdDataSet.xss	✓	6/19/2023 7:18 PM	Dataset Internal In...	1 KB
Global.asax	✓	5/18/2023 7:31 PM	ASP.NET Server A...	1 KB
Site.Master	✓	7/11/2023 9:00 PM	ASP.NET Master P...	8 KB
Site.Mobile.Master	✓	5/18/2023 7:31 PM	ASP.NET Master P...	1 KB
ViewSwitcher.ascx	✓	5/18/2023 7:31 PM	ASCX File	1 KB
Web.config	✓	7/11/2023 12:22 AM	Configuration Sou...	8 KB

Promoting to the server

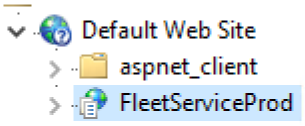
When the application is published on the local computer it needs to be copied to the IIS on the server and applied to the Default Web Site, which should be associated to the AppPool of the application to run. The application can use the application identity and v 4.0 of .Net

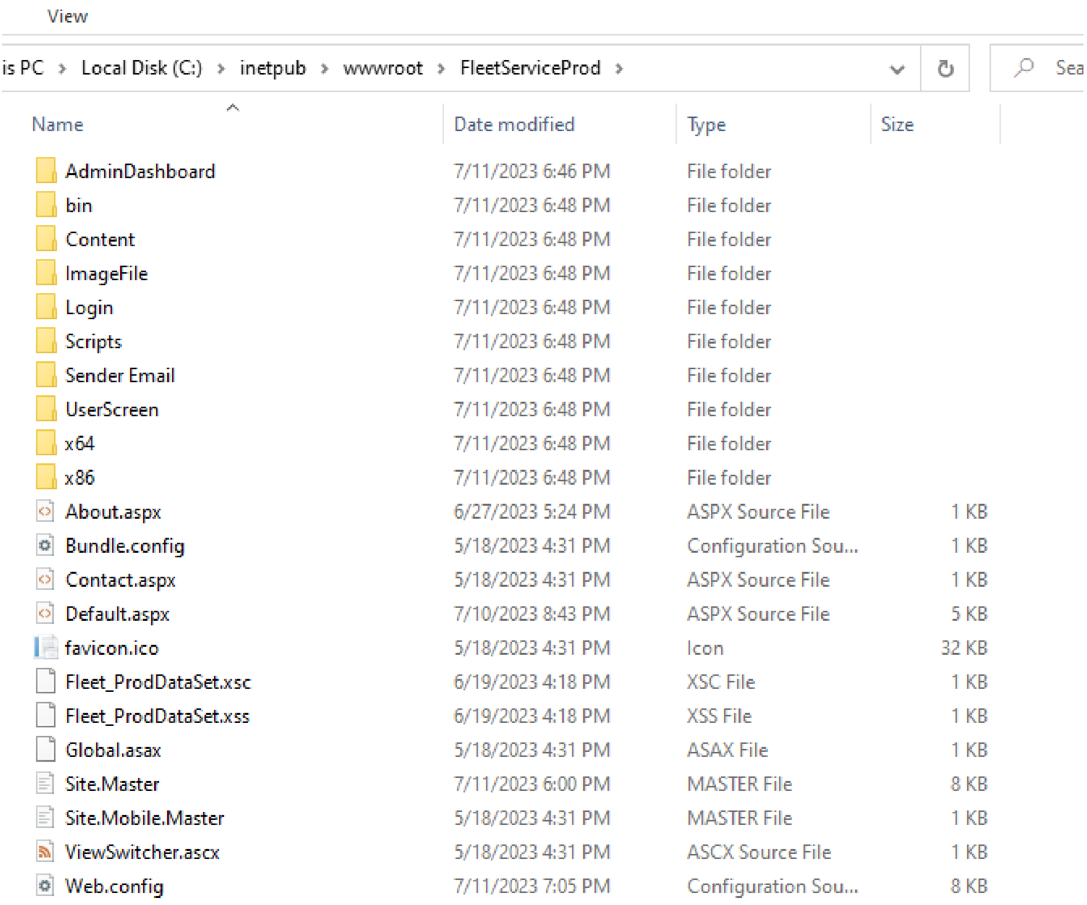


Application Pools

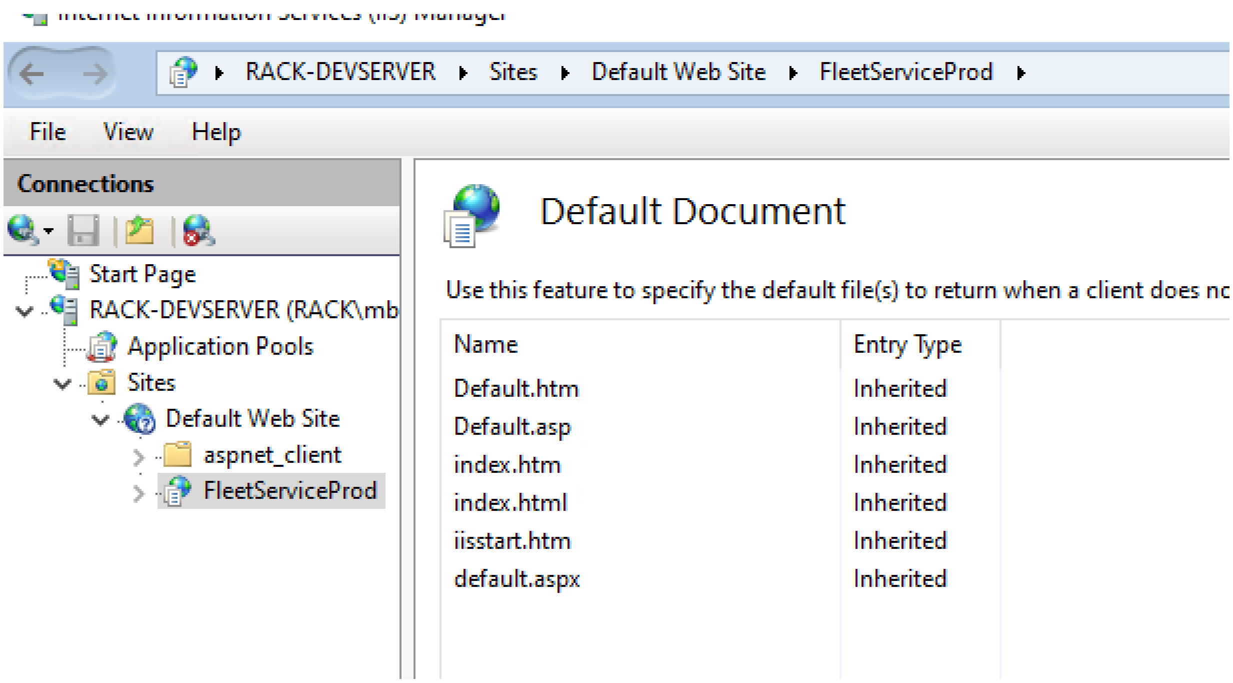
This page lets you view and manage the list of application pools on the server. Application pools are associated with worker pro
isolation among different applications.

Name	Status	.NET CLR V...	Managed Pipel...	Identity	Applications
.NET v4.5	Started	v4.0	Integrated	ApplicationPoolIdentity	0
.NET v4.5 Classic	Started	v4.0	Classic	ApplicationPoolIdentity	0
DefaultAppPool	Started	v4.0	Integrated	ApplicationPoolIdentity	1
FleetServiceProd	Started	v4.0	Integrated	ApplicationPoolIdentity	1




View
is PC › Local Disk (C:) › inetpub › wwwroot › FleetServiceProd ›
Sea

Name	Date modified	Type	Size
AdminDashboard	7/11/2023 6:46 PM	File folder	
bin	7/11/2023 6:48 PM	File folder	
Content	7/11/2023 6:48 PM	File folder	
ImageFile	7/11/2023 6:48 PM	File folder	
Login	7/11/2023 6:48 PM	File folder	
Scripts	7/11/2023 6:48 PM	File folder	
Sender Email	7/11/2023 6:48 PM	File folder	
UserScreen	7/11/2023 6:48 PM	File folder	
x64	7/11/2023 6:48 PM	File folder	
x86	7/11/2023 6:48 PM	File folder	
About.aspx	6/27/2023 5:24 PM	ASPX Source File	1 KB
Bundle.config	5/18/2023 4:31 PM	Configuration Sou...	1 KB
Contact.aspx	5/18/2023 4:31 PM	ASPX Source File	1 KB
Default.aspx	7/10/2023 8:43 PM	ASPX Source File	5 KB
favicon.ico	5/18/2023 4:31 PM	Icon	32 KB
Fleet_ProdDataSet.xsc	6/19/2023 4:18 PM	XSC File	1 KB
Fleet_ProdDataSet.xss	6/19/2023 4:18 PM	XSS File	1 KB
Global.asax	5/18/2023 4:31 PM	ASAX File	1 KB
Site.Master	7/11/2023 6:00 PM	MASTER File	8 KB
Site.Mobile.Master	5/18/2023 4:31 PM	MASTER File	1 KB
ViewSwitcher.ascx	5/18/2023 4:31 PM	ASCX Source File	1 KB
Web.config	7/11/2023 7:05 PM	Configuration Sou...	8 KB



Default Document

Use this feature to specify the default file(s) to return when a client does nc

Name	Entry Type
Default.htm	Inherited
Default.asp	Inherited
index.htm	Inherited
index.html	Inherited
iisstart.htm	Inherited
default.aspx	Inherited

8. Setting up an Event Viewer Log

The application uses the event viewer log to store all the errors and for easy troubleshooting if any issues occur.

Execute the following script in the PowerShell on the server where the application is hosted.

```
New-EventLog -source SCCFleetServices -LogName SCCFleetServiceEventLog
```

For any questions associated with this Installation guide,

please contact us at via maksbotukh@gmail.com