
PanacheLegalDocs

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Panache Legal is a complete open source LegalTech platform available to use with unlimited users for no licence fee.

Caution: Panache Legal is currently in early alpha and is not suitable for production environments, it should only be used for early testing.

You should expect missing or incomplete features/functionality with the potential for data loss during upgrades.

Check the GitHub release information for further details.

The Panache Legal Platform is distributed under the Free Software Foundation's [GNU AGPL v3.0](#) licence.

Free and/or Commercial support

If you need help building and running the Panache Legal Platform please [contact us](#) as we can help.

Supporting Panache Legal

Panache Legal is being built as a collaborative project designed to be supported by the community. If you want to get involved [let us know](#) and consider sponsoring the project to help provide a LegalTech platform for all.



The Panache Legal Platform

The Panache Legal Platform is built around the following.

Panache Legal Identity

Identity services for Panache Legal that uses the open source [IdentityServer](#) to provide OpenID Connect authentication.

Panache Legal UI

A responsive UI built using [ASP.NET Core](#) with [Razor Pages](#).

With the following services:

Note: Panache Legal is being built with all functionality encapsulated within loosely coupled [microservices](#).

The services below are those that are currently in place for testing purposes. See the [GitHub Project](#) area for more information on what services are currently in development.

Panache Legal Foundation

Provides core functionality to Panache Legal including User and System settings along with multi-language support.

Panache Legal Client

Provides CRM functionality for Panache Legal for storing client data.

Panache Legal Team

Allows for Panache Legal users to be assigned to Teams (replicating organisational structures) enabling access to information within the system to be controlled.

Panache Legal Task

Core component that allows for the creation of tasks within Panache Legal.

Panache Legal File

Provides storage of files including version control.

Running Panache Legal with Docker

The easiest way to get the Panache Legal Platform up and running is to use [Docker](#). Docker provides a way of packaging applications in a container which can be run locally, in an on premise environment, or via a platform like [Microsoft Azure App Service](#). When running Panache Legal via docker everything you need is included within the container meaning that as long as you have Docker installed you have everything you need to run Panache Legal.

All Panache Legal Platform containers are distributed via the Panache Software [Docker Hub](#), here you can find docker containers for all the components of the Panache Legal platform distributed as Linux containers (that can be run on Windows, Mac or Linux) as well as Linux ARM32 containers suitable for running on ARM platforms like the [Raspberry Pi](#).

2.1 0 to LegalTech in 3 minutes

Once you have Docker installed on your system and have a database available it's possible to get Panache Legal up and running in as little as 3 minutes, just watch [this video](#) to see an example of getting Panache Legal up and running on a Raspberry Pi.

This guide provides you with details to get you up and running with Panache Legal in a Windows 10 environment. The principal will be the same in other environments (like Mac and Linux) so you should be able to adapt these instructions by making adjustments to the docker compose file.

Note: Panache Legal is currently in early alpha development and is not suitable for production environments, it should only be used for early testing.

Panache Legal containers currently include a development build of the software and do not support features like HTTPS to prevent complications with certificates.

The current build of Panache Legal supports Microsoft SQL Server and MySQL.

2.2 TL;DR

What follows is a step by step guide to running Panache Legal using Docker on Windows but the TL;DR is.

1. Install [Docker Desktop](#)
2. Download the example [docker-compose.yml](#) file
3. Run the following command:

```
docker-compose up -d
```

2.3 Install Docker

For Windows you will need to install the [Docker Desktop](#) application. Under Windows Docker requires that Hyper-V is installed (Available in Windows 10 Pro).

You can enable Hyper-V via Windows 'Apps and Features'.

1. Right click on the Windows button and select 'Apps and Features'.
2. Select **Programs and Features** on the right under related settings.
3. Select **Turn Windows Features on or off**.
4. Select **Hyper-V** and click **OK**.

2.4 Setup Database Server

The Panache Legal Platform requires either a Microsoft SQL Server or MySQL database. Depending on your situation you may have a local database server installation, an on premise server that you have access to, or a hosted database server provided through a service like Microsoft Azure.

Usage of Microsoft SQL Server requires a licence and so your use case will be specific to you and/or your organisation.

In this example we will use a MySQL Linux [docker container](#). You could alternatively use a [Microsoft SQL Server Linux container](#) with the free developer licence. This licence includes some limitations on how it can be deployed and you should make sure to read the licence details on the docker hub page, as well as checking which [edition](#) will be suitable for your use case.

If you are not using the docker container version of MySQL or Microsoft SQL Server as per this guide and instead will connect to your own database installation you will need to ensure you have a valid connection string to access your database.

2.5 Download Docker compose file

You can download an example docker compose file via the following link.

GitHub: [docker-compose.yml](#)

Steps to run:

1. Place downloaded **docker-compose.yml** file in a directory of your choosing.
2. Right click on the Windows button and select 'Windows PowerShell'.

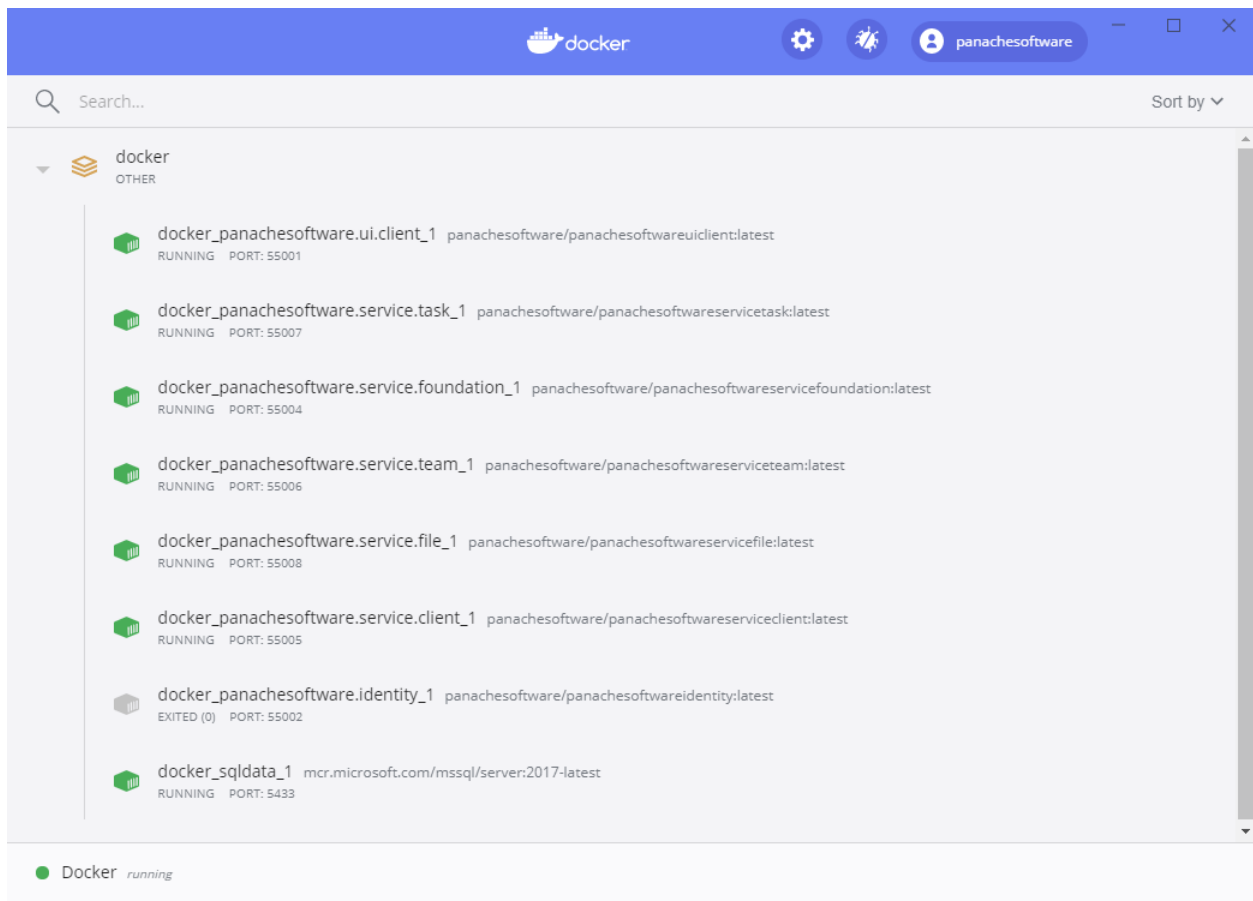
3. In Windows Powershell navigate to the directory where you stored **docker-compose.yml**.
4. Type the following command:

```
docker-compose up -d
```

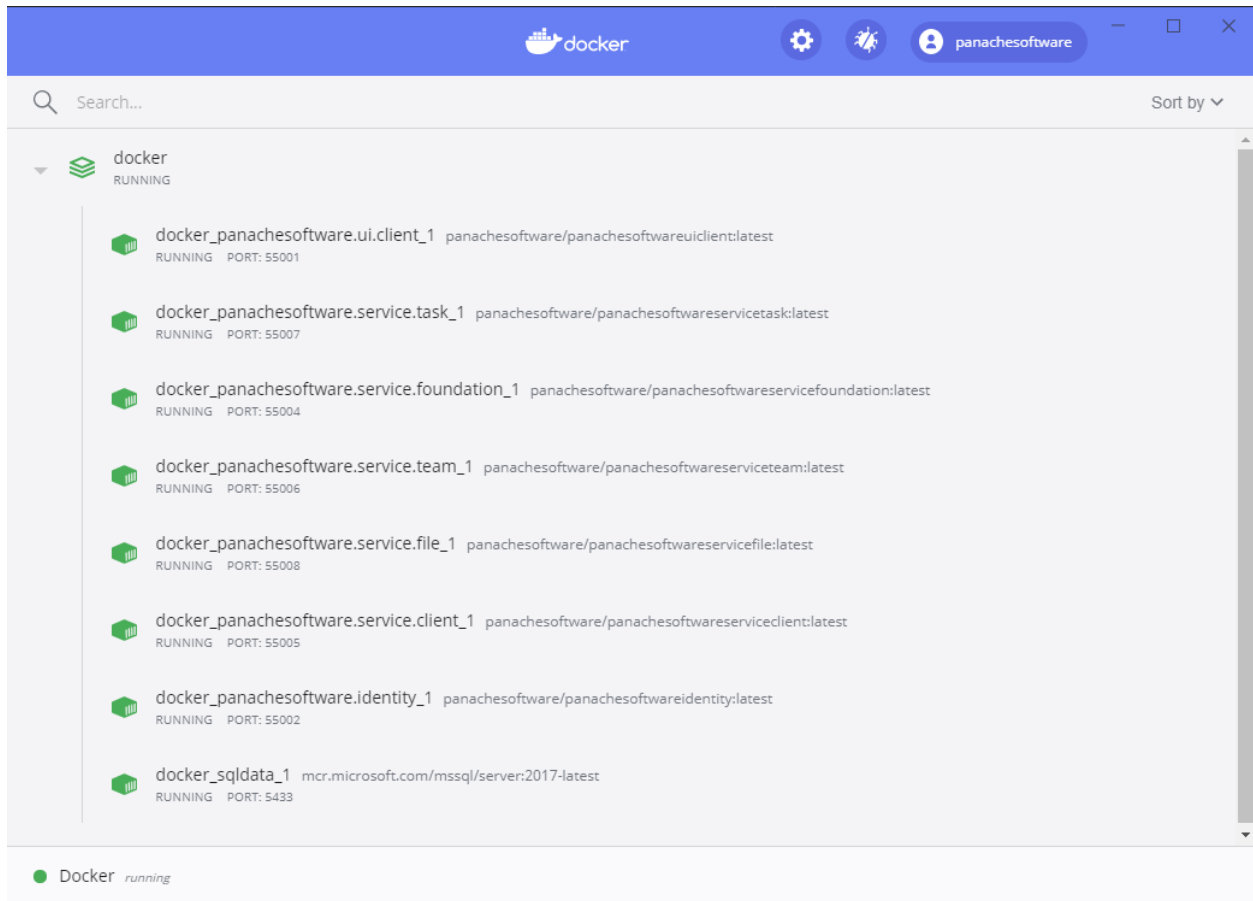
This will download all the containers from the Docker Hub and start them up.

Note: Time to download and start all containers will depend on your internet connection and the performance of your computer.

This docker compose file will download and start a Linux based MySQL container to store the Panache Legal Platform databases, because several of the containers require this to be in place before they can run correctly if you open the docker dashboard (via the docker desktop application) after running the command above you may see containers that fail to start.



If this happens simply click on the **Start** button next to any containers that are not running until all have started correctly



Once all containers are running open a web browser and navigate to **http://host.docker.internal:55001** to open the Panache Legal Platform. You can use the following details to login (assuming you did not change the **PanacheSoftware__StartDomain** environment variable to a different domain).

Username: `admin@panachesoftware.com`

Password: `Passw0rd123!`

Docker Compose File

You can download an example docker compose file via the following link.

GitHub: [docker-compose.yml](#)

This file has been configured to download and start up everything you need to run the Panache Legal Platform and its currently available services.

3.1 Environment Variables

The Panache Legal Platform docker images require several environment variables to be configured, these are listed below.

Note: Not all images require the same variables.

ASPNETCORE_ENVIRONMENT

Set's the environment that this container uses. This should be set as **Development**

ASPNETCORE_URLS

The http ports to be spun up by the webserver. This should be set as **http://+:80**

ConnectionStrings__MySQL

If the image requires a database use this to specify a connection string to a MySQL database.

ConnectionStrings__MSSQL

If the image requires a database use this to specify a connection string to a MSSQL database.

PanacheSoftware__CallMethod__APICallsSecure

Specifies if API calls should be made using **http** (value of false) or **https** (value of true). Currently Panache Legal docker images only support a value of **False**

PanacheSoftware__CallMethod__UICallsSecure

Specifies if UI calls should be made using **http** (value of false) or **https** (value of true). Currently Panache Legal docker images only support a value of **False**

PanacheSoftware__CallMethod__UseAPIGateway

Specifies if API calls should be handled via the Panache Legal API Gateway service. Currently unsupported when using Panache Legal docker images so this should have a value of **False**

PanacheSoftware__StartDomain

The underlying foundations of the Panache Legal Platform support running as **multitenant**. This variable should be used to specify the start domain (tenant) and all users created in system will require a username set with an email address that matches this domain. A default user will be created on startup based on this value so, for example, if this is set with a value of **panachesoftware.com** then on start a default user will be created with the following details.

Username: admin@panachesoftware.com

Password: Passw0rd123!

PanacheSoftware__DBProvider

Used to specify if the service should use Microsoft SQL server or MySQL for its database. This should have a value of either **MSSQL** or **MySQL** and you should make sure the corresponding connection string is configured.

PanacheSoftware__Url__IdentityServerURL and PanacheSoftware__Url__IdentityServerURLSecure

Specifies the URL for the Panache Legal Identity service. Currently Panache Legal docker images do not support the **Secure** URL.

PanacheSoftware__Url__APIGatewayURL and PanacheSoftware__Url__APIGatewayURLSecure

Specifies the URL for the Panache Legal API Gateway. Currently not supported by Panache Legal docker images, although this should still be included.

PanacheSoftware__Url__UIClientURL and PanacheSoftware__Url__UIClientURLSecure

Specifies the URL for the Panache Legal UI. Currently Panache Legal docker images do not support the **Secure** URL.

PanacheSoftware__Url__ClientServiceURL and PanacheSoftware__Url__ClientServiceURLSecure

Specifies the URL for the Panache Legal Client service. Currently Panache Legal docker images do not support the **Secure** URL.

PanacheSoftware__Url__FileServiceURL and PanacheSoftware__Url__FileServiceURLSecure

Specifies the URL for the Panache Legal File service. Currently Panache Legal docker images do not support the **Secure** URL.

PanacheSoftware__Url__FoundationServiceURL and PanacheSoftware__Url__FoundationServiceURLSecure

Specifies the URL for the Panache Legal Foundation service. Currently Panache Legal docker images do not support the **Secure** URL.

PanacheSoftware__Url__TaskServiceURL and PanacheSoftware__Url__TaskServiceURLSecure

Specifies the URL for the Panache Legal Task service. Currently Panache Legal docker images do not support the **Secure** URL.

PanacheSoftware__Url__TeamServiceURL and PanacheSoftware__Url__TeamServiceURLSecure

Specifies the URL for the Panache Legal Team service. Currently Panache Legal docker images do not support the **Secure** URL.

PanacheSoftware__Secret__UIClientSecret

The secret used to identify the Panache Legal UI to Panache Legal Identity. Should be set as a unique GUID.

```
PanacheSoftware__Secret__APIGatewaySecret
```

The secret used to identify the Panache Legal API Gateway to Panache Legal Identity. Should be set as a unique GUID.

```
PanacheSoftware__Secret__ClientServiceSecret
```

The secret used to identify the Panache Legal Client service to Panache Legal Identity. Should be set as a unique GUID.

```
PanacheSoftware__Secret__FileServiceSecret
```

The secret used to identify the Panache Legal File service to Panache Legal Identity. Should be set as a unique GUID.

```
PanacheSoftware__Secret__FoundationServiceSecret
```

The secret used to identify the Panache Legal Foundation service to Panache Legal Identity. Should be set as a unique GUID.

```
PanacheSoftware__Secret__TaskServiceSecret
```

The secret used to identify the Panache Legal Task service to Panache Legal Identity. Should be set as a unique GUID.

```
PanacheSoftware__Secret__TeamServiceSecret
```

The secret used to identify the Panache Legal Team service to Panache Legal Identity. Should be set as a unique GUID.

3.2 MySQL or MSSQL Docker

MySQL:

```
sqldata:
  image: mysql:latest
environment:
  - MYSQL_ROOT_PASSWORD=Passw0rd123!
volumes:
  - panachesoftware-sqldata:/var/opt/mssql
```

Microsoft SQL Server:

```
sqldata:
  image: mcr.microsoft.com/mssql/server:2017-latest
environment:
  - SA_PASSWORD=Passw0rd123!
  - ACCEPT_EULA=Y
ports:
  - "5433:1433"
volumes:
  - panachesoftware-sqldata:/var/opt/mssql
```

```
volumes:
  panachesoftware-sqldata:
    external: false
```

This downloads and starts up a Linux based SQL Server container or a MySQL container in docker.

For Microsoft SQL server the password for the **sa** user will be set to 'Passw0rd123!' and the EULA will be automatically accepted. On MySQL the password for the **root** user will be set to 'Passw0rd123!'.

For Microsoft SQL Server it is assumed that you will be running this SQL Server image using the free developer licence, but you should confirm that this licence applies to your organisation and use case or whether you require a separate licence.

Note: This is not required if you are connecting to an existing database installation.

3.3 Panache Software Identity

```
panachesoftware.identity:
  image: panachesoftware/panachesoftwareidentity:latest
  depends_on:
    - sqldata
  environment:
    - ASPNETCORE_ENVIRONMENT=Development
    - ASPNETCORE_URLS=http://+:80
    - ConnectionStrings__MySQL=server=sqldata;port=3306;database=PanacheSoftware.
    ↪ Identity;user=root;password=Passw0rd123!;GuidFormat=Char36
    - PanacheSoftware__CallMethod__APICallsSecure=False
    - PanacheSoftware__CallMethod__UICallsSecure=False
    - PanacheSoftware__CallMethod__UseAPIGateway=False
    - PanacheSoftware__StartDomain=panachesoftware.com
    - PanacheSoftware__DBProvider=MySQL
    - PanacheSoftware__Url__UIClientURL=http://host.docker.internal:55001
    - PanacheSoftware__Url__UIClientURLSecure=https://host.docker.internal:44301
    - PanacheSoftware__Secret__UIClientSecret=49C1A7E1-0C79-4A89-A3D6-A37998FB86B0
    - PanacheSoftware__Secret__APIGatewaySecret=DDDCB193-213C-43FB-967A-
    ↪ 5A911D2EFC04
    - PanacheSoftware__Secret__ClientServiceSecret=1314EF18-40FA-4B16-83DF-
    ↪ B276FF0D92A9
    - PanacheSoftware__Secret__FileServiceSecret=839C649E-4FE3-410C-B43F-
    ↪ 69C017A52676
    - PanacheSoftware__Secret__FoundationServiceSecret=70CD8BB9-5256-42CF-8B95-
    ↪ DD61C1051AD0
    - PanacheSoftware__Secret__TaskServiceSecret=AC654B02-E46B-4359-B908-
    ↪ 87479CBE1CEB
    - PanacheSoftware__Secret__TeamServiceSecret=5C9BF545-3C20-4448-9EEC-
    ↪ 6B3E745B671E
  ports:
    - "55002:80"
```

The Identity Service requires a database (which will be created on start-up) as well as the secrets to identify all of the other Panache Legal services, along with the address of the Panache Legal UI.

3.4 Panache Software Team Service

```
panachesoftware.service.team:
  image: panachesoftware/panachesoftware serviceteam:latest
  depends_on:
    - sqldata
    - panachesoftware.identity
  environment:
```

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```

- ASPNETCORE_ENVIRONMENT=Development
- ASPNETCORE_URLS=http://+:80
- ConnectionStrings__MySQL=server=sqldata;port=3306;database=PanacheSoftware.
↔Team;user=root;password=Passw0rd123!;GuidFormat=Char36
- PanacheSoftware__CallMethod__APICallsSecure=False
- PanacheSoftware__CallMethod__UICallsSecure=False
- PanacheSoftware__CallMethod__UseAPIGateway=False
- PanacheSoftware__StartDomain=panachesoftware.com
- PanacheSoftware__DBProvider=MySQL
- PanacheSoftware__Url__IdentityServerURL=http://host.docker.internal:55002
- PanacheSoftware__Url__IdentityServerURLSecure=https://host.docker.
↔internal:44302
- PanacheSoftware__Secret__TeamServiceSecret=5C9BF545-3C20-4448-9EEC-
↔6B3E745B671E
  ports:
    - "55006:80"

```

The Team Service requires a database (which will be created on start-up) as well as a secret that can be used to identify it and the location of the Panache Legal Identity service to allow it to perform authorisation against requests.

3.5 Panache Software Task Service

```

panachesoftware.service.task:
  image: panachesoftware/panachesoftware.servicetask:latest
  depends_on:
    - sqldata
    - panachesoftware.identity
    - panachesoftware.service.team
  environment:
    - ASPNETCORE_ENVIRONMENT=Development
    - ASPNETCORE_URLS=http://+:80
    - ConnectionStrings__MySQL=server=sqldata;port=3306;database=PanacheSoftware.
↔Task;user=root;password=Passw0rd123!;GuidFormat=Char36
    - PanacheSoftware__CallMethod__APICallsSecure=False
    - PanacheSoftware__CallMethod__UICallsSecure=False
    - PanacheSoftware__CallMethod__UseAPIGateway=False
    - PanacheSoftware__StartDomain=panachesoftware.com
    - PanacheSoftware__DBProvider=MySQL
    - PanacheSoftware__Url__IdentityServerURL=http://host.docker.internal:55002
    - PanacheSoftware__Url__IdentityServerURLSecure=https://host.docker.
↔internal:44302
    - PanacheSoftware__Url__TeamServiceURL=http://host.docker.internal:55006
    - PanacheSoftware__Url__TeamServiceURLSecure=https://host.docker.
↔internal:44306
    - PanacheSoftware__Secret__TaskServiceSecret=AC654B02-E46B-4359-B908-
↔87479CBE1CEB
  ports:
    - "55007:80"

```

The Task Service requires a database (which will be created on start-up) as well as a secret that can be used to identify it and the location of the Panache Legal Identity service to allow it to perform authorisation against requests. This service also needs to call the Team service for data control.

3.6 Panache Software Foundation Service

```
panachesoftware.service.foundation:
  image: panachesoftware/panachesoftwarefoundation:latest
  depends_on:
    - sqldata
    - panachesoftware.identity
  environment:
    - ASPNETCORE_ENVIRONMENT=Development
    - ASPNETCORE_URLS=http://+:80
    - ConnectionStrings__MySQL=server=sqldata;port=3306;database=PanacheSoftware.
↪Foundation;user=root;password=Passw0rd123!;GuidFormat=Char36
    - PanacheSoftware__CallMethod__APICallsSecure=False
    - PanacheSoftware__CallMethod__UICallsSecure=False
    - PanacheSoftware__CallMethod__UseAPIGateway=False
    - PanacheSoftware__StartDomain=panachesoftware.com
    - PanacheSoftware__DBProvider=MySQL
    - PanacheSoftware__Url__IdentityServerURL=http://host.docker.internal:55002
    - PanacheSoftware__Url__IdentityServerURLSecure=https://host.docker.
↪internal:44302
    - PanacheSoftware__Secret__FoundationServiceSecret=70CD8BB9-5256-42CF-8B95-
↪DD61C1051AD0
  ports:
    - "55004:80"
```

The Foundation Service requires a database (which will be created on start-up) as well as a secret that can be used to identify it and the location of the Panache Legal Identity service to allow it to perform authorisation against requests.

3.7 Panache Software File Service

```
panachesoftware.service.file:
  image: panachesoftware/panachesoftwarefile:latest
  depends_on:
    - sqldata
    - panachesoftware.identity
  environment:
    - ASPNETCORE_ENVIRONMENT=Development
    - ASPNETCORE_URLS=http://+:80
    - ConnectionStrings__MySQL=server=sqldata;port=3306;database=PanacheSoftware.
↪File;user=root;password=Passw0rd123!;GuidFormat=Char36
    - PanacheSoftware__CallMethod__APICallsSecure=False
    - PanacheSoftware__CallMethod__UICallsSecure=False
    - PanacheSoftware__CallMethod__UseAPIGateway=False
    - PanacheSoftware__StartDomain=panachesoftware.com
    - PanacheSoftware__DBProvider=MySQL
    - PanacheSoftware__Url__IdentityServerURL=http://host.docker.internal:55002
    - PanacheSoftware__Url__IdentityServerURLSecure=https://host.docker.
↪internal:44302
    - PanacheSoftware__Secret__FileServiceSecret=839C649E-4FE3-410C-B43F-
↪69C017A52676
  ports:
    - "55008:80"
```

The File Service requires a database (which will be created on start-up) as well as a secret that can be used to identify it and the location of the Panache Legal Identity service to allow it to perform authorisation against requests.

3.8 Panache Software Client Service

```

panachesoftware.service.client:
  image: panachesoftware/panachesoftwareclient:latest
  depends_on:
    - sqldata
    - panachesoftware.identity
  environment:
    - ASPNETCORE_ENVIRONMENT=Development
    - ASPNETCORE_URLS=http://+:80
    - ConnectionStrings__MySQL=server=sqldata;port=3306;database=PanacheSoftware.
    ↪Client;user=root;password=PasswOrd123!;GuidFormat=Char36
    - PanacheSoftware__CallMethod__APICallsSecure=False
    - PanacheSoftware__CallMethod__UICallsSecure=False
    - PanacheSoftware__CallMethod__UseAPIGateway=False
    - PanacheSoftware__StartDomain=panachesoftware.com
    - PanacheSoftware__DBProvider=MySQL
    - PanacheSoftware__Url__IdentityServerURL=http://host.docker.internal:55002
    - PanacheSoftware__Url__IdentityServerURLSecure=https://host.docker.
    ↪internal:44302
    - PanacheSoftware__Secret__ClientServiceSecret=1314EF18-40FA-4B16-83DF-
    ↪B276FF0D92A9
  ports:
    - "55005:80"

```

The Client Service requires a database (which will be created on start-up) as well as a secret that can be used to identify it and the location of the Panache Legal Identity service to allow it to perform authorisation against requests.

3.9 Panache Software UI

```

panachesoftware.ui.client:
  image: panachesoftware/panachesoftwareuiclient:latest
  depends_on:
    - panachesoftware.identity
    - panachesoftware.service.team
    - panachesoftware.service.task
    - panachesoftware.service.foundation
    - panachesoftware.service.file
    - panachesoftware.service.client
  environment:
    - ASPNETCORE_ENVIRONMENT=Development
    - ASPNETCORE_URLS=http://+:80
    - PanacheSoftware__CallMethod__APICallsSecure=False
    - PanacheSoftware__CallMethod__UICallsSecure=False
    - PanacheSoftware__CallMethod__UseAPIGateway=False
    - PanacheSoftware__StartDomain=panachesoftware.com
    - PanacheSoftware__Url__IdentityServerURL=http://host.docker.internal:55002
    - PanacheSoftware__Url__IdentityServerURLSecure=https://host.docker.
    ↪internal:44302
    - PanacheSoftware__Url__APIGatewayURL=http://host.docker.internal:55003
    - PanacheSoftware__Url__APIGatewayURLSecure=https://host.docker.internal:44303
    - PanacheSoftware__Url__UIClientURL=http://host.docker.internal:55001
    - PanacheSoftware__Url__UIClientURLSecure=https://host.docker.internal:44301
    - PanacheSoftware__Url__ClientServiceURL=http://host.docker.internal:55005

```

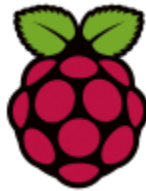
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```
    - PanacheSoftware__Url__ClientServiceURLSecure=https://host.docker.
↪internal:44305
    - PanacheSoftware__Url__FileServiceURL=http://host.docker.internal:55008
    - PanacheSoftware__Url__FileServiceURLSecure=https://host.docker.
↪internal:44308
    - PanacheSoftware__Url__FoundationServiceURL=http://host.docker.internal:55004
    - PanacheSoftware__Url__FoundationServiceURLSecure=https://host.docker.
↪internal:44304
    - PanacheSoftware__Url__TaskServiceURL=http://host.docker.internal:55007
    - PanacheSoftware__Url__TaskServiceURLSecure=https://host.docker.
↪internal:44307
    - PanacheSoftware__Url__TeamServiceURL=http://host.docker.internal:55006
    - PanacheSoftware__Url__TeamServiceURLSecure=https://host.docker.
↪internal:44306
    - PanacheSoftware__Secret__UIClientSecret=49C1A7E1-0C79-4A89-A3D6-A37998FB86B0
  ports:
    - "55001:80"
```

The Panache Legal UI requires a secret that can be used to identify it and the location of all other Panache Legal services so that it can make appropriate API calls.

Running Panache Legal on a Raspberry Pi



One of the core design considerations for the Panache Legal Platform is to build a LegalTech solution that can be used by an individual lawyer, right through to an enterprise, on any environment they may want to use. Panache Legal is built using [Microsoft .NET Core](#) which provides cross platform functionality allowing Panache Legal to run on Windows, Mac and Linux (including ARM based variants).

Although it is unlikely that you would run a production environment on a [Raspberry Pi](#) it is possible to get Panache Legal running on one which means that if you had no available system to test on, you could get up and running with the complete platform for just the cost of a single Raspberry Pi, around £55.

If you want to run Panache Legal on a Raspberry Pi you can grab a copy of the code and build it yourself, but a far simpler method is to run the same way you can on Windows and use our pre-built docker images that you can find on our [Docker Hub](#) area, look for the versions ending with ‘-arm32’.

4.1 0 to LegalTech in 3 minutes

With a SQL Server database configured and Docker installed on your Raspberry Pi it's possible to get Panache Legal up and running in as little as 3 minutes, just watch [this video](#) to see an example.

Note: Panache Legal is currently in early alpha development and is not suitable for production environments, it should only be used for early testing.

Panache Legal containers currently include a development build of the software and do not support features like HTTPS to prevent complications with certificates.

The current build of Panache Legal supports Microsoft SQL Server and MySQL.

4.2 TL;DR

What follows is a step by step guide to running Panache Legal on a Raspberry Pi but the TL;DR is.

1. Install Docker and Docker compose
2. Setup a MySQL database
3. Download the example `docker-compose.yml` file
4. Run the following command:

```
docker-compose up -d
```

4.3 Setup your Raspberry Pi

Firstly you need to setup your Raspberry Pi, this example has been tested with a Raspberry Pi 4 model B 4GB.

1. [Purchase](#) a Raspberry Pi 4 Model B 4GB
2. Wait patiently for delivery....
3. [Setup](#) your Raspberry Pi
4. Before you install Panache Legal maybe checkout some of the [cool](#) things you can do, don't worry, we'll wait....
5. Install Docker and Docker Compose. There are lots of guides for this, here's one to get you going: [Guide](#)

4.4 Setup MySQL

In this example we will use MySQL installed locally on the Raspberry Pi. The easiest way to set this up is to use the following guides:

1. Install MySQL on your Raspberry Pi using MariaDB: [MySQL Install](#)
2. Although not required you should install phpMyAdmin to make Database administration easy: [phpMyAdmin Install](#)

Make sure to note down the MySQL username and password you setup.

4.5 Download Docker compose file

You can download an example docker compose file suitable for a Raspberry Pi (ARM based Linux) via the following link.

GitHub: [docker-compose.yml](#)

Steps to run:

1. Place downloaded **docker-compose.yml** file into a folder of your choosing.

2. Edit the **docker-compose.yml** file changing the following value to the IP address of your MySQL installation (or 127.0.0.1 if installed locally):

```
{ip address of MySQL server}
```

3. Edit the **docker-compose.yml** file changing the following to 172.17.0.1, or the IP address of your Raspberry Pi if running remotely:

```
{ip address of host or 172.17.0.1 if only accessing locally}
```

4. Edit the **docker-compose.yml** to delete the below, or set it to the the IP address of your Raspberry Pi if running remotely:

```
{delete this if running locally, otherwise ip address of host i.e. 123.456.78.  
↪900:}
```

5. In the shell, navigate to the folder where you downloaded the **docker-compose.yml** file and run the following command:

```
docker-compose up -d
```

This will download all the containers from the Docker Hub and start them up.

Note: Time to download and start all containers will depend on your internet connection and the performance of your computer.

Once all containers are running open a web browser and navigate to **http://172.17.0.1:55001** to open the Panache Legal Platform. You can use the following details to login (assuming you did not change the **PanacheSoftware__StartDomain** environment variable to a different domain).

Username: admin@panachesoftware.com

Password: Passw0rd123!

Docker Compose File Examples

The following are examples of complete docker compose files.

5.1 Windows with MySQL

The following will provide a Panache Legal Platform environment with a MySQL database running in a Linux Docker container:

```
version: "3.4"
services:

sqldata:
  image: mysql:latest
  environment:
    - MYSQL_ROOT_PASSWORD=Passw0rd123!
  volumes:
    - panachesoftware-sqldata:/var/opt/mssql

panachesoftware.identity:
  image: panachesoftware/panachesoftwareidentity:latest
  depends_on:
    - sqldata
  environment:
    - ASPNETCORE_ENVIRONMENT=Development
    - ASPNETCORE_URLS=http://+:80
    - ConnectionStrings__MySQL=server=sqldata;port=3306;database=PanacheSoftware.
    - Identity;user=root;password=Passw0rd123!;GuidFormat=Char36
    - PanacheSoftware__CallMethod__APICallsSecure=False
    - PanacheSoftware__CallMethod__UICallsSecure=False
    - PanacheSoftware__CallMethod__UseAPIGateway=False
    - PanacheSoftware__StartDomain=panachesoftware.com
    - PanacheSoftware__DBProvider=MySQL
    - PanacheSoftware__Url__UIClientURL=http://host.docker.internal:55001
```

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```

- PanacheSoftware__Url__UIClientURLSecure=https://host.docker.internal:44301
- PanacheSoftware__Secret__UIClientSecret=49C1A7E1-0C79-4A89-A3D6-A37998FB86B0
- PanacheSoftware__Secret__APIGatewaySecret=DDDCB193-213C-43FB-967A-5A911D2EFC04
- PanacheSoftware__Secret__ClientServiceSecret=1314EF18-40FA-4B16-83DF-
↪B276FF0D92A9
- PanacheSoftware__Secret__FileServiceSecret=839C649E-4FE3-410C-B43F-69C017A52676
- PanacheSoftware__Secret__FoundationServiceSecret=70CD8BB9-5256-42CF-8B95-
↪DD61C1051AD0
- PanacheSoftware__Secret__TaskServiceSecret=AC654B02-E46B-4359-B908-87479CBE1CEB
- PanacheSoftware__Secret__TeamServiceSecret=5C9BF545-3C20-4448-9EEC-6B3E745B671E
ports:
- "55002:80"
restart: always

panachesoftware.service.team:
  image: panachesoftware/panachesoftware Serviceteam:latest
  depends_on:
  - sqldata
  - panachesoftware.identity
  environment:
  - ASPNETCORE_ENVIRONMENT=Development
  - ASPNETCORE_URLS=http://+:80
  - ConnectionStrings__MySQL=server=sqldata;port=3306;database=PanacheSoftware.Team;
↪user=root;password=Passw0rd123!;GuidFormat=Char36
  - PanacheSoftware__CallMethod__APICallsSecure=False
  - PanacheSoftware__CallMethod__UICallsSecure=False
  - PanacheSoftware__CallMethod__UseAPIGateway=False
  - PanacheSoftware__StartDomain=panachesoftware.com
  - PanacheSoftware__DBProvider=MySQL
  - PanacheSoftware__Url__IdentityServerURL=http://host.docker.internal:55002
  - PanacheSoftware__Url__IdentityServerURLSecure=https://host.docker.internal:44302
  - PanacheSoftware__Secret__TeamServiceSecret=5C9BF545-3C20-4448-9EEC-6B3E745B671E
ports:
- "55006:80"
restart: always

panachesoftware.service.task:
  image: panachesoftware/panachesoftware Servicetask:latest
  depends_on:
  - sqldata
  - panachesoftware.identity
  - panachesoftware.service.team
  environment:
  - ASPNETCORE_ENVIRONMENT=Development
  - ASPNETCORE_URLS=http://+:80
  - ConnectionStrings__MySQL=server=sqldata;port=3306;database=PanacheSoftware.Task;
↪user=root;password=Passw0rd123!;GuidFormat=Char36
  - PanacheSoftware__CallMethod__APICallsSecure=False
  - PanacheSoftware__CallMethod__UICallsSecure=False
  - PanacheSoftware__CallMethod__UseAPIGateway=False
  - PanacheSoftware__StartDomain=panachesoftware.com
  - PanacheSoftware__DBProvider=MySQL
  - PanacheSoftware__Url__IdentityServerURL=http://host.docker.internal:55002
  - PanacheSoftware__Url__IdentityServerURLSecure=https://host.docker.internal:44302
  - PanacheSoftware__Url__TeamServiceURL=http://host.docker.internal:55006
  - PanacheSoftware__Url__TeamServiceURLSecure=https://host.docker.internal:44306
  - PanacheSoftware__Secret__TaskServiceSecret=AC654B02-E46B-4359-B908-87479CBE1CEB

```

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```

ports:
- "55007:80"
restart: always

panachesoftware.service.foundation:
  image: panachesoftware/panachesoftware-service-foundation:latest
  depends_on:
  - sqldata
  - panachesoftware.identity
  environment:
  - ASPNETCORE_ENVIRONMENT=Development
  - ASPNETCORE_URLS=http://+:80
  - ConnectionStrings__MySQL=server=sqldata;port=3306;database=PanacheSoftware.
↔Foundation;user=root;password=Passw0rd123!;GuidFormat=Char36
  - PanacheSoftware__CallMethod__APICallsSecure=False
  - PanacheSoftware__CallMethod__UICallsSecure=False
  - PanacheSoftware__CallMethod__UseAPIGateway=False
  - PanacheSoftware__StartDomain=panachesoftware.com
  - PanacheSoftware__DBProvider=MySQL
  - PanacheSoftware__Url__IdentityServerURL=http://host.docker.internal:55002
  - PanacheSoftware__Url__IdentityServerURLSecure=https://host.docker.internal:44302
  - PanacheSoftware__Secret__FoundationServiceSecret=70CD8BB9-5256-42CF-8B95-
↔DD61C1051AD0
  ports:
  - "55004:80"
  restart: always

panachesoftware.service.file:
  image: panachesoftware/panachesoftware-service-file:latest
  depends_on:
  - sqldata
  - panachesoftware.identity
  environment:
  - ASPNETCORE_ENVIRONMENT=Development
  - ASPNETCORE_URLS=http://+:80
  - ConnectionStrings__MySQL=server=sqldata;port=3306;database=PanacheSoftware.File;
↔user=root;password=Passw0rd123!;GuidFormat=Char36
  - PanacheSoftware__CallMethod__APICallsSecure=False
  - PanacheSoftware__CallMethod__UICallsSecure=False
  - PanacheSoftware__CallMethod__UseAPIGateway=False
  - PanacheSoftware__StartDomain=panachesoftware.com
  - PanacheSoftware__DBProvider=MySQL
  - PanacheSoftware__Url__IdentityServerURL=http://host.docker.internal:55002
  - PanacheSoftware__Url__IdentityServerURLSecure=https://host.docker.internal:44302
  - PanacheSoftware__Secret__FileServiceSecret=839C649E-4FE3-410C-B43F-69C017A52676
  ports:
  - "55008:80"
  restart: always

panachesoftware.service.client:
  image: panachesoftware/panachesoftware-service-client:latest
  depends_on:
  - sqldata
  - panachesoftware.identity
  environment:
  - ASPNETCORE_ENVIRONMENT=Development
  - ASPNETCORE_URLS=http://+:80

```

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```

- ConnectionStrings__MySQL=server=sqldata;port=3306;database=PanacheSoftware.
↔Client;user=root;password=Passw0rd123!;GuidFormat=Char36
- PanacheSoftware__CallMethod__APICallsSecure=False
- PanacheSoftware__CallMethod__UICallsSecure=False
- PanacheSoftware__CallMethod__UseAPIGateway=False
- PanacheSoftware__StartDomain=panachesoftware.com
- PanacheSoftware__DBProvider=MySQL
- PanacheSoftware__Url__IdentityServerURL=http://host.docker.internal:55002
- PanacheSoftware__Url__IdentityServerURLSecure=https://host.docker.internal:44302
- PanacheSoftware__Secret__ClientServiceSecret=1314EF18-40FA-4B16-83DF-
↔B276FF0D92A9
  ports:
  - "55005:80"
  restart: always

panachesoftware.ui.client:
  image: panachesoftware/panachesoftwareuiclient:latest
  depends_on:
  - panachesoftware.identity
  - panachesoftware.service.team
  - panachesoftware.service.task
  - panachesoftware.service.foundation
  - panachesoftware.service.file
  - panachesoftware.service.client
  environment:
  - ASPNETCORE_ENVIRONMENT=Development
  - ASPNETCORE_URLS=http://+:80
  - PanacheSoftware__CallMethod__APICallsSecure=False
  - PanacheSoftware__CallMethod__UICallsSecure=False
  - PanacheSoftware__CallMethod__UseAPIGateway=False
  - PanacheSoftware__StartDomain=panachesoftware.com
  - PanacheSoftware__Url__IdentityServerURL=http://host.docker.internal:55002
  - PanacheSoftware__Url__IdentityServerURLSecure=https://host.docker.internal:44302
  - PanacheSoftware__Url__APIGatewayURL=http://host.docker.internal:55003
  - PanacheSoftware__Url__APIGatewayURLSecure=https://host.docker.internal:44303
  - PanacheSoftware__Url__UIClientURL=http://host.docker.internal:55001
  - PanacheSoftware__Url__UIClientURLSecure=https://host.docker.internal:44301
  - PanacheSoftware__Url__ClientServiceURL=http://host.docker.internal:55005
  - PanacheSoftware__Url__ClientServiceURLSecure=https://host.docker.internal:44305
  - PanacheSoftware__Url__FileServiceURL=http://host.docker.internal:55008
  - PanacheSoftware__Url__FileServiceURLSecure=https://host.docker.internal:44308
  - PanacheSoftware__Url__FoundationServiceURL=http://host.docker.internal:55004
  - PanacheSoftware__Url__FoundationServiceURLSecure=https://host.docker.
↔internal:44304
  - PanacheSoftware__Url__TaskServiceURL=http://host.docker.internal:55007
  - PanacheSoftware__Url__TaskServiceURLSecure=https://host.docker.internal:44307
  - PanacheSoftware__Url__TeamServiceURL=http://host.docker.internal:55006
  - PanacheSoftware__Url__TeamServiceURLSecure=https://host.docker.internal:44306
  - PanacheSoftware__Secret__UIClientSecret=49C1A7E1-0C79-4A89-A3D6-A37998FB86B0
  ports:
  - "55001:80"
  restart: always

volumes:
panachesoftware-sqldata:
  external: false

```

Once all containers are running open a web browser and navigate to **http://host.docker.internal:55001** to open the Panache Legal Platform. You can use the following details to login (assuming you did not change the **PanacheSoftware__StartDomain** environment variable to a different domain).

Username: `admin@panachesoftware.com`

Password: `Passw0rd123!`

5.2 Windows with MSSQL

The following will provide a Panache Legal Platform environment with a Microsoft SQL Server database running in a Linux Docker container:

```
version: "3.4"
services:

sqldata:
  image: mcr.microsoft.com/mssql/server:2017-latest
  environment:
    - SA_PASSWORD=Passw0rd123!
    - ACCEPT_EULA=Y
  ports:
    - "5433:1433"
  volumes:
    - panachesoftware-sqldata:/var/opt/mssql

panachesoftware.identity:
  image: panachesoftware/panachesoftwareidentity:latest
  depends_on:
    - sqldata
  environment:
    - ASPNETCORE_ENVIRONMENT=Development
    - ASPNETCORE_URLS=http://+:80
    - ConnectionStrings__MSSQL=Server=sqldata;Database=PanacheSoftware.Identity.
↔ Docker;User Id=sa;Password=Passw0rd123!
    - PanacheSoftware__CallMethod__APICallsSecure=False
    - PanacheSoftware__CallMethod__UICallsSecure=False
    - PanacheSoftware__CallMethod__UseAPIGateway=False
    - PanacheSoftware__StartDomain=panachesoftware.com
    - PanacheSoftware__DBProvider=MSSQL
    - PanacheSoftware__Url__UIClientURL=http://host.docker.internal:55001
    - PanacheSoftware__Url__UIClientURLSecure=https://host.docker.internal:44301
    - PanacheSoftware__Secret__UIClientSecret=49C1A7E1-0C79-4A89-A3D6-A37998FB86B0
    - PanacheSoftware__Secret__APIGatewaySecret=DDDCB193-213C-43FB-967A-5A911D2EFC04
    - PanacheSoftware__Secret__ClientServiceSecret=1314EF18-40FA-4B16-83DF-
↔ B276FF0D92A9
    - PanacheSoftware__Secret__FileServiceSecret=839C649E-4FE3-410C-B43F-69C017A52676
    - PanacheSoftware__Secret__FoundationServiceSecret=70CD8BB9-5256-42CF-8B95-
↔ DD61C1051AD0
    - PanacheSoftware__Secret__TaskServiceSecret=AC654B02-E46B-4359-B908-87479CBE1CEB
    - PanacheSoftware__Secret__TeamServiceSecret=5C9BF545-3C20-4448-9EEC-6B3E745B671E
  ports:
    - "55002:80"

panachesoftware.service.team:
  image: panachesoftware/panachesoftware serviceteam:latest
```

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```

depends_on:
- sqldata
- panachesoftware.identity
environment:
- ASPNETCORE_ENVIRONMENT=Development
- ASPNETCORE_URLS=http://+:80
- ConnectionStrings__MSSQL=Server=sqldata;Database=PanacheSoftware.Service.Team.
↔Docker;User Id=sa;Password=Passw0rd123!
- PanacheSoftware__CallMethod__APICallsSecure=False
- PanacheSoftware__CallMethod__UICallsSecure=False
- PanacheSoftware__CallMethod__UseAPIGateway=False
- PanacheSoftware__StartDomain=panachesoftware.com
- PanacheSoftware__DBProvider=MSSQL
- PanacheSoftware__Url__IdentityServerURL=http://host.docker.internal:55002
- PanacheSoftware__Url__IdentityServerURLSecure=https://host.docker.internal:44302
- PanacheSoftware__Secret__TeamServiceSecret=5C9BF545-3C20-4448-9EEC-6B3E745B671E
ports:
- "55006:80"

panachesoftware.service.task:
  image: panachesoftware/panachesoftware.servicetask:latest
  depends_on:
  - sqldata
  - panachesoftware.identity
  - panachesoftware.service.team
  environment:
  - ASPNETCORE_ENVIRONMENT=Development
  - ASPNETCORE_URLS=http://+:80
  - ConnectionStrings__MSSQL=Server=sqldata;Database=PanacheSoftware.Service.Task.
↔Docker;User Id=sa;Password=Passw0rd123!
  - PanacheSoftware__CallMethod__APICallsSecure=False
  - PanacheSoftware__CallMethod__UICallsSecure=False
  - PanacheSoftware__CallMethod__UseAPIGateway=False
  - PanacheSoftware__StartDomain=panachesoftware.com
  - PanacheSoftware__DBProvider=MSSQL
  - PanacheSoftware__Url__IdentityServerURL=http://host.docker.internal:55002
  - PanacheSoftware__Url__IdentityServerURLSecure=https://host.docker.internal:44302
  - PanacheSoftware__Url__TeamServiceURL=http://host.docker.internal:55006
  - PanacheSoftware__Url__TeamServiceURLSecure=https://host.docker.internal:44306
  - PanacheSoftware__Secret__TaskServiceSecret=AC654B02-E46B-4359-B908-87479CBE1CEB
  ports:
  - "55007:80"

panachesoftware.service.foundation:
  image: panachesoftware/panachesoftware.servicefoundation:latest
  depends_on:
  - sqldata
  - panachesoftware.identity
  environment:
  - ASPNETCORE_ENVIRONMENT=Development
  - ASPNETCORE_URLS=http://+:80
  - ConnectionStrings__MSSQL=Server=sqldata;Database=PanacheSoftware.Service.
↔Foundation.Docker;User Id=sa;Password=Passw0rd123!
  - PanacheSoftware__CallMethod__APICallsSecure=False
  - PanacheSoftware__CallMethod__UICallsSecure=False
  - PanacheSoftware__CallMethod__UseAPIGateway=False
  - PanacheSoftware__StartDomain=panachesoftware.com

```

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```

- PanacheSoftware__DBProvider=MSSQL
- PanacheSoftware__Url__IdentityServerURL=http://host.docker.internal:55002
- PanacheSoftware__Url__IdentityServerURLSecure=https://host.docker.internal:44302
- PanacheSoftware__Secret__FoundationServiceSecret=70CD8BB9-5256-42CF-8B95-
↪DD61C1051AD0
  ports:
  - "55004:80"

panachesoftware.service.file:
  image: panachesoftware/panachesoftware.service.file:latest
  depends_on:
  - sqldata
  - panachesoftware.identity
  environment:
  - ASPNETCORE_ENVIRONMENT=Development
  - ASPNETCORE_URLS=http://+:80
  - ConnectionStrings__MSSQL=Server=sqldata;Database=PanacheSoftware.Service.File.
↪Docker;User Id=sa;Password=Passw0rd123!
  - PanacheSoftware__CallMethod__APICallsSecure=False
  - PanacheSoftware__CallMethod__UICallsSecure=False
  - PanacheSoftware__CallMethod__UseAPIGateway=False
  - PanacheSoftware__StartDomain=panachesoftware.com
  - PanacheSoftware__DBProvider=MSSQL
  - PanacheSoftware__Url__IdentityServerURL=http://host.docker.internal:55002
  - PanacheSoftware__Url__IdentityServerURLSecure=https://host.docker.internal:44302
  - PanacheSoftware__Secret__FileServiceSecret=839C649E-4FE3-410C-B43F-69C017A52676
  ports:
  - "55008:80"

panachesoftware.service.client:
  image: panachesoftware/panachesoftware.service.client:latest
  depends_on:
  - sqldata
  - panachesoftware.identity
  environment:
  - ASPNETCORE_ENVIRONMENT=Development
  - ASPNETCORE_URLS=http://+:80
  - ConnectionStrings__MSSQL=Server=sqldata;Database=PanacheSoftware.Service.Client.
↪Docker;User Id=sa;Password=Passw0rd123!
  - PanacheSoftware__CallMethod__APICallsSecure=False
  - PanacheSoftware__CallMethod__UICallsSecure=False
  - PanacheSoftware__CallMethod__UseAPIGateway=False
  - PanacheSoftware__StartDomain=panachesoftware.com
  - PanacheSoftware__DBProvider=MSSQL
  - PanacheSoftware__Url__IdentityServerURL=http://host.docker.internal:55002
  - PanacheSoftware__Url__IdentityServerURLSecure=https://host.docker.internal:44302
  - PanacheSoftware__Secret__ClientServiceSecret=1314EF18-40FA-4B16-83DF-
↪B276FF0D92A9
  ports:
  - "55005:80"

panachesoftware.ui.client:
  image: panachesoftware/panachesoftware.ui.client:latest
  depends_on:
  - panachesoftware.identity
  - panachesoftware.service.team
  - panachesoftware.service.task

```

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```

- panachesoftware.service.foundation
- panachesoftware.service.file
- panachesoftware.service.client
environment:
- ASPNETCORE_ENVIRONMENT=Development
- ASPNETCORE_URLS=http://+:80
- PanacheSoftware__CallMethod__APICallsSecure=False
- PanacheSoftware__CallMethod__UICallsSecure=False
- PanacheSoftware__CallMethod__UseAPIGateway=False
- PanacheSoftware__StartDomain=panachesoftware.com
- PanacheSoftware__Url__IdentityServerURL=http://host.docker.internal:55002
- PanacheSoftware__Url__IdentityServerURLSecure=https://host.docker.internal:44302
- PanacheSoftware__Url__APIGatewayURL=http://host.docker.internal:55003
- PanacheSoftware__Url__APIGatewayURLSecure=https://host.docker.internal:44303
- PanacheSoftware__Url__UIClientURL=http://host.docker.internal:55001
- PanacheSoftware__Url__UIClientURLSecure=https://host.docker.internal:44301
- PanacheSoftware__Url__ClientServiceURL=http://host.docker.internal:55005
- PanacheSoftware__Url__ClientServiceURLSecure=https://host.docker.internal:44305
- PanacheSoftware__Url__FileServiceURL=http://host.docker.internal:55008
- PanacheSoftware__Url__FileServiceURLSecure=https://host.docker.internal:44308
- PanacheSoftware__Url__FoundationServiceURL=http://host.docker.internal:55004
- PanacheSoftware__Url__FoundationServiceURLSecure=https://host.docker.
↪internal:44304
- PanacheSoftware__Url__TaskServiceURL=http://host.docker.internal:55007
- PanacheSoftware__Url__TaskServiceURLSecure=https://host.docker.internal:44307
- PanacheSoftware__Url__TeamServiceURL=http://host.docker.internal:55006
- PanacheSoftware__Url__TeamServiceURLSecure=https://host.docker.internal:44306
- PanacheSoftware__Secret__UIClientSecret=49C1A7E1-0C79-4A89-A3D6-A37998FB86B0
ports:
- "55001:80"

volumes:
panachesoftware-sqldata:
  external: false

```

Once all containers are running open a web browser and navigate to **http://host.docker.internal:55001** to open the Panache Legal Platform. You can use the following details to login (assuming you did not change the **PanacheSoftware__StartDomain** environment variable to a different domain).

Username: admin@panachesoftware.com

Password: PasswOrd123!

5.3 Raspberry Pi with MySQL

The following will provide a Panache Legal Platform environment running on a Raspberry Pi with a local MySQL database (Raspberry Pi has a local address of 192.168.86.247):

```

version: "3.4"
services:

panachesoftware.identity:
  image: panachesoftware/panachesoftwareidentity-arm32:latest
  environment:
    - ASPNETCORE_ENVIRONMENT=Development

```

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```

- ASPNETCORE_URLS=http://+:80
- ConnectionStrings__MySQL=server=192.168.86.247;port=3306;
↔database=PanacheSoftware.Identity.Docker;user=pi;password=Passw0rd123!;
↔GuidFormat=Char36
- PanacheSoftware__CallMethod__APICallsSecure=False
- PanacheSoftware__CallMethod__UICallsSecure=False
- PanacheSoftware__CallMethod__UseAPIGateway=False
- PanacheSoftware__DBProvider=MySQL
- PanacheSoftware__StartDomain=panachesoftware.com
- PanacheSoftware__Url__UIClientURL=http://172.17.0.1:55001
- PanacheSoftware__Url__UIClientURLSecure=https://172.17.0.1:44301
- PanacheSoftware__Secret__UIClientSecret=49C1A7E1-0C79-4A89-A3D6-A37998FB86B0
- PanacheSoftware__Secret__APIGatewaySecret=DDDCB193-213C-43FB-967A-5A911D2EFC04
- PanacheSoftware__Secret__ClientServiceSecret=1314EF18-40FA-4B16-83DF-
↔B276FF0D92A9
- PanacheSoftware__Secret__FileServiceSecret=839C649E-4FE3-410C-B43F-69C017A52676
- PanacheSoftware__Secret__FoundationServiceSecret=70CD8BB9-5256-42CF-8B95-
↔DD61C1051AD0
- PanacheSoftware__Secret__TaskServiceSecret=AC654B02-E46B-4359-B908-87479CBE1CEB
- PanacheSoftware__Secret__TeamServiceSecret=5C9BF545-3C20-4448-9EEC-6B3E745B671E
ports:
- "55002:80"
restart: always

panachesoftware.service.team:
  image: panachesoftware/panachesoftware serviceteam-arm32:latest
  depends_on:
  - panachesoftware.identity
  environment:
  - ASPNETCORE_ENVIRONMENT=Development
  - ASPNETCORE_URLS=http://+:80
  - ConnectionStrings__MySQL=server=192.168.86.247;port=3306;
↔database=PanacheSoftware.Team.Docker;user=pi;password=Passw0rd123!;GuidFormat=Char36
  - PanacheSoftware__CallMethod__APICallsSecure=False
  - PanacheSoftware__CallMethod__UICallsSecure=False
  - PanacheSoftware__CallMethod__UseAPIGateway=False
  - PanacheSoftware__DBProvider=MySQL
  - PanacheSoftware__StartDomain=panachesoftware.com
  - PanacheSoftware__Url__IdentityServerURL=http://172.17.0.1:55002
  - PanacheSoftware__Url__IdentityServerURLSecure=https://172.17.0.1:44302
  - PanacheSoftware__Secret__TeamServiceSecret=5C9BF545-3C20-4448-9EEC-6B3E745B671E
  ports:
  - "55006:80"
  restart: always

panachesoftware.service.task:
  image: panachesoftware/panachesoftware servicetask-arm32:latest
  depends_on:
  - panachesoftware.identity
  - panachesoftware.service.team
  environment:
  - ASPNETCORE_ENVIRONMENT=Development
  - ASPNETCORE_URLS=http://+:80
  - ConnectionStrings__MySQL=server=192.168.86.247;port=3306;
↔database=PanacheSoftware.Task.Docker;user=pi;password=Passw0rd123!;GuidFormat=Char36
  - PanacheSoftware__CallMethod__APICallsSecure=False
  - PanacheSoftware__CallMethod__UICallsSecure=False

```

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```

- PanacheSoftware__CallMethod__UseAPIGateway=False
- PanacheSoftware__DBProvider=MySQL
- PanacheSoftware__StartDomain=panachesoftware.com
- PanacheSoftware__Url__IdentityServerURL=http://172.17.0.1:55002
- PanacheSoftware__Url__IdentityServerURLSecure=https://172.17.0.1:44302
- PanacheSoftware__Url__TeamServiceURL=http://172.17.0.1:55006
- PanacheSoftware__Url__TeamServiceURLSecure=https://172.17.0.1:44306
- PanacheSoftware__Secret__TaskServiceSecret=AC654B02-E46B-4359-B908-87479CBE1CEB
ports:
- "55007:80"
restart: always

panachesoftware.service.foundation:
  image: panachesoftware/panachesoftware-servicefoundation-arm32:latest
  depends_on:
  - panachesoftware.identity
  environment:
  - ASPNETCORE_ENVIRONMENT=Development
  - ASPNETCORE_URLS=http://+:80
  - ConnectionStrings__MySQL=server=192.168.86.247;port=3306;
↪database=PanacheSoftware.Foundation.Docker;user=pi;password=Passw0rd123!;
↪GuidFormat=Char36
  - PanacheSoftware__CallMethod__APICallsSecure=False
  - PanacheSoftware__CallMethod__UICallsSecure=False
  - PanacheSoftware__CallMethod__UseAPIGateway=False
  - PanacheSoftware__DBProvider=MySQL
  - PanacheSoftware__StartDomain=panachesoftware.com
  - PanacheSoftware__Url__IdentityServerURL=http://172.17.0.1:55002
  - PanacheSoftware__Url__IdentityServerURLSecure=https://172.17.0.1:44302
  - PanacheSoftware__Secret__FoundationServiceSecret=70CD8BB9-5256-42CF-8B95-
↪DD61C1051AD0
  ports:
  - "55004:80"
  restart: always

panachesoftware.service.file:
  image: panachesoftware/panachesoftware-servicefile-arm32:latest
  depends_on:
  - panachesoftware.identity
  environment:
  - ASPNETCORE_ENVIRONMENT=Development
  - ASPNETCORE_URLS=http://+:80
  - ConnectionStrings__MySQL=server=192.168.86.247;port=3306;
↪database=PanacheSoftware.File.Docker;user=pi;password=Passw0rd123!;GuidFormat=Char36
  - PanacheSoftware__CallMethod__APICallsSecure=False
  - PanacheSoftware__CallMethod__UICallsSecure=False
  - PanacheSoftware__CallMethod__UseAPIGateway=False
  - PanacheSoftware__DBProvider=MySQL
  - PanacheSoftware__StartDomain=panachesoftware.com
  - PanacheSoftware__Url__IdentityServerURL=http://172.17.0.1:55002
  - PanacheSoftware__Url__IdentityServerURLSecure=https://172.17.0.1:44302
  - PanacheSoftware__Secret__FileServiceSecret=839C649E-4FE3-410C-B43F-69C017A52676
  ports:
  - "55008:80"
  restart: always

panachesoftware.service.client:

```

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```

image: panachesoftware/panachesoftwareclient-arm32:latest
depends_on:
- panachesoftware.identity
environment:
- ASPNETCORE_ENVIRONMENT=Development
- ASPNETCORE_URLS=http://+:80
- ConnectionStrings__MySQL=server=192.168.86.247;port=3306;
↪database=PanacheSoftware.Client.Docker;user=pi;password=Passw0rd123!;
↪GuidFormat=Char36
- PanacheSoftware__CallMethod__APICallsSecure=False
- PanacheSoftware__CallMethod__UICallsSecure=False
- PanacheSoftware__CallMethod__UseAPIGateway=False
- PanacheSoftware__DBProvider=MySQL
- PanacheSoftware__StartDomain=panachesoftware.com
- PanacheSoftware__Url__IdentityServerURL=http://172.17.0.1:55002
- PanacheSoftware__Url__IdentityServerURLSecure=https://172.17.0.1:44302
- PanacheSoftware__Secret__ClientServiceSecret=1314EF18-40FA-4B16-83DF-
↪B276FF0D92A9
ports:
- "55005:80"

panachesoftware.ui.client:
image: panachesoftware/panachesoftwareuiclient-arm32:latest
depends_on:
- panachesoftware.identity
- panachesoftware.service.team
- panachesoftware.service.task
- panachesoftware.service.foundation
- panachesoftware.service.file
- panachesoftware.service.client
environment:
- ASPNETCORE_ENVIRONMENT=Development
- ASPNETCORE_URLS=http://+:80
- PanacheSoftware__CallMethod__APICallsSecure=False
- PanacheSoftware__CallMethod__UICallsSecure=False
- PanacheSoftware__CallMethod__UseAPIGateway=False
- PanacheSoftware__StartDomain=panachesoftware.com
- PanacheSoftware__Url__IdentityServerURL=http://172.17.0.1:55002
- PanacheSoftware__Url__IdentityServerURLSecure=https://172.17.0.1:44302
- PanacheSoftware__Url__APIGatewayURL=http://172.17.0.1:55003
- PanacheSoftware__Url__APIGatewayURLSecure=https://172.17.0.1:44303
- PanacheSoftware__Url__UIClientURL=http://172.17.0.1:55001
- PanacheSoftware__Url__UIClientURLSecure=https://172.17.0.1:44301
- PanacheSoftware__Url__ClientServiceURL=http://172.17.0.1:55005
- PanacheSoftware__Url__ClientServiceURLSecure=https://172.17.0.1:44305
- PanacheSoftware__Url__FileServiceURL=http://172.17.0.1:55008
- PanacheSoftware__Url__FileServiceURLSecure=https://172.17.0.1:44308
- PanacheSoftware__Url__FoundationServiceURL=http://172.17.0.1:55004
- PanacheSoftware__Url__FoundationServiceURLSecure=https://172.17.0.1:44304
- PanacheSoftware__Url__TaskServiceURL=http://172.17.0.1:55007
- PanacheSoftware__Url__TaskServiceURLSecure=https://172.17.0.1:44307
- PanacheSoftware__Url__TeamServiceURL=http://172.17.0.1:55006
- PanacheSoftware__Url__TeamServiceURLSecure=https://172.17.0.1:44306
- PanacheSoftware__Secret__UIClientSecret=49C1A7E1-0C79-4A89-A3D6-A37998FB86B0
ports:
- "55001:80"
restart: always

```

Once all containers are running open a web browser on the Raspberry Pi and navigate to **http://172.17.0.1:55001** to open the Panache Legal Platform. You can use the following details to login (assuming you did not change the **PanacheSoftware__StartDomain** environment variable to a different domain).

Username: `admin@panachesoftware.com`

Password: `PasswOrd123!`

5.4 Raspberry Pi with MySQL (remote access)

The following will provide a Panache Legal Platform environment running on a Raspberry Pi with a local MySQL database (Raspberry Pi has a local address of 192.168.86.247), the Docker containers will have their network ports exposed to the host so you can access the platform from another machine on the same network:

```
version: "3.4"
services:

panachesoftware.identity:
  image: panachesoftware/panachesoftwareidentity-arm32:latest
  environment:
    - ASPNETCORE_ENVIRONMENT=Development
    - ASPNETCORE_URLS=http://+:80
    - ConnectionStrings__MySQL=server=192.168.86.247;port=3306;
    ↪database=PanacheSoftware.Identity.Docker;user=pi;password=PasswOrd123!;
    ↪GuidFormat=Char36
    - PanacheSoftware__CallMethod__APICallsSecure=False
    - PanacheSoftware__CallMethod__UICallsSecure=False
    - PanacheSoftware__CallMethod__UseAPIGateway=False
    - PanacheSoftware__DBProvider=MySQL
    - PanacheSoftware__StartDomain=panachesoftware.com
    - PanacheSoftware__Url__UIClientURL=http://192.168.86.247:55001
    - PanacheSoftware__Url__UIClientURLSecure=https://192.168.86.247:44301
    - PanacheSoftware__Secret__UIClientSecret=49C1A7E1-0C79-4A89-A3D6-A37998FB86B0
    - PanacheSoftware__Secret__APIGatewaySecret=DDDCB193-213C-43FB-967A-5A911D2EFC04
    - PanacheSoftware__Secret__ClientServiceSecret=1314EF18-40FA-4B16-83DF-
    ↪B276FF0D92A9
    - PanacheSoftware__Secret__FileServiceSecret=839C649E-4FE3-410C-B43F-69C017A52676
    - PanacheSoftware__Secret__FoundationServiceSecret=70CD8BB9-5256-42CF-8B95-
    ↪DD61C1051AD0
    - PanacheSoftware__Secret__TaskServiceSecret=AC654B02-E46B-4359-B908-87479CBE1CEB
    - PanacheSoftware__Secret__TeamServiceSecret=5C9BF545-3C20-4448-9EEC-6B3E745B671E
  ports:
    - "192.168.86.247:55002:80"
  restart: always

panachesoftware.service.team:
  image: panachesoftware/panachesoftware serviceteam-arm32:latest
  depends_on:
    - panachesoftware.identity
  environment:
    - ASPNETCORE_ENVIRONMENT=Development
    - ASPNETCORE_URLS=http://+:80
    - ConnectionStrings__MySQL=server=192.168.86.247;port=3306;
    ↪database=PanacheSoftware.Team.Docker;user=pi;password=PasswOrd123!;GuidFormat=Char36
    - PanacheSoftware__CallMethod__APICallsSecure=False
    - PanacheSoftware__CallMethod__UICallsSecure=False
```

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```

- PanacheSoftware__CallMethod__UseAPIGateway=False
- PanacheSoftware__DBProvider=MySQL
- PanacheSoftware__StartDomain=panachesoftware.com
- PanacheSoftware__Url__IdentityServerURL=http://192.168.86.247:55002
- PanacheSoftware__Url__IdentityServerURLSecure=https://192.168.86.247:44302
- PanacheSoftware__Secret__TeamServiceSecret=5C9BF545-3C20-4448-9EEC-6B3E745B671E
ports:
- "192.168.86.247:55006:80"
restart: always

panachesoftware.service.task:
  image: panachesoftware/panachesoftware servicetask-arm32:latest
  depends_on:
  - panachesoftware.identity
  - panachesoftware.service.team
  environment:
  - ASPNETCORE_ENVIRONMENT=Development
  - ASPNETCORE_URLS=http://+:80
  - ConnectionStrings__MySQL=server=192.168.86.247;port=3306;
↔database=PanacheSoftware.Task.Docker;user=pi;password=Passw0rd123!;GuidFormat=Char36
  - PanacheSoftware__CallMethod__APICallsSecure=False
  - PanacheSoftware__CallMethod__UICallsSecure=False
  - PanacheSoftware__CallMethod__UseAPIGateway=False
  - PanacheSoftware__DBProvider=MySQL
  - PanacheSoftware__StartDomain=panachesoftware.com
  - PanacheSoftware__Url__IdentityServerURL=http://192.168.86.247:55002
  - PanacheSoftware__Url__IdentityServerURLSecure=https://192.168.86.247:44302
  - PanacheSoftware__Url__TeamServiceURL=http://192.168.86.247:55006
  - PanacheSoftware__Url__TeamServiceURLSecure=https://192.168.86.247:44306
  - PanacheSoftware__Secret__TaskServiceSecret=AC654B02-E46B-4359-B908-87479CBE1CEB
ports:
- "192.168.86.247:55007:80"
restart: always

panachesoftware.service.foundation:
  image: panachesoftware/panachesoftware servicefoundation-arm32:latest
  depends_on:
  - panachesoftware.identity
  environment:
  - ASPNETCORE_ENVIRONMENT=Development
  - ASPNETCORE_URLS=http://+:80
  - ConnectionStrings__MySQL=server=192.168.86.247;port=3306;
↔database=PanacheSoftware.Foundation.Docker;user=pi;password=Passw0rd123!;
↔GuidFormat=Char36
  - PanacheSoftware__CallMethod__APICallsSecure=False
  - PanacheSoftware__CallMethod__UICallsSecure=False
  - PanacheSoftware__CallMethod__UseAPIGateway=False
  - PanacheSoftware__DBProvider=MySQL
  - PanacheSoftware__StartDomain=panachesoftware.com
  - PanacheSoftware__Url__IdentityServerURL=http://192.168.86.247:55002
  - PanacheSoftware__Url__IdentityServerURLSecure=https://192.168.86.247:44302
  - PanacheSoftware__Secret__FoundationServiceSecret=70CD8BB9-5256-42CF-8B95-
↔DD61C1051AD0
ports:
- "192.168.86.247:55004:80"
restart: always

```

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```

panachesoftware.service.file:
  image: panachesoftware/panachesoftware-servicefile-arm32:latest
  depends_on:
    - panachesoftware.identity
  environment:
    - ASPNETCORE_ENVIRONMENT=Development
    - ASPNETCORE_URLS=http://+:80
    - ConnectionStrings__MySQL=server=192.168.86.247;port=3306;
    ↪database=PanacheSoftware.File.Docker;user=pi;password=PasswOrd123!;GuidFormat=Char36
    - PanacheSoftware__CallMethod__APICallsSecure=False
    - PanacheSoftware__CallMethod__UICallsSecure=False
    - PanacheSoftware__CallMethod__UseAPIGateway=False
    - PanacheSoftware__DBProvider=MySQL
    - PanacheSoftware__StartDomain=panachesoftware.com
    - PanacheSoftware__Url__IdentityServerURL=http://192.168.86.247:55002
    - PanacheSoftware__Url__IdentityServerURLSecure=https://192.168.86.247:44302
    - PanacheSoftware__Secret__FileServiceSecret=839C649E-4FE3-410C-B43F-69C017A52676
  ports:
    - "192.168.86.247:55008:80"
  restart: always

panachesoftware.service.client:
  image: panachesoftware/panachesoftware-serviceclient-arm32:latest
  depends_on:
    - panachesoftware.identity
  environment:
    - ASPNETCORE_ENVIRONMENT=Development
    - ASPNETCORE_URLS=http://+:80
    - ConnectionStrings__MySQL=server=192.168.86.247;port=3306;
    ↪database=PanacheSoftware.Client.Docker;user=pi;password=PasswOrd123!;
    ↪GuidFormat=Char36
    - PanacheSoftware__CallMethod__APICallsSecure=False
    - PanacheSoftware__CallMethod__UICallsSecure=False
    - PanacheSoftware__CallMethod__UseAPIGateway=False
    - PanacheSoftware__DBProvider=MySQL
    - PanacheSoftware__StartDomain=panachesoftware.com
    - PanacheSoftware__Url__IdentityServerURL=http://192.168.86.247:55002
    - PanacheSoftware__Url__IdentityServerURLSecure=https://192.168.86.247:44302
    - PanacheSoftware__Secret__ClientServiceSecret=1314EF18-40FA-4B16-83DF-
    ↪B276FF0D92A9
  ports:
    - "192.168.86.247:55005:80"

panachesoftware.ui.client:
  image: panachesoftware/panachesoftware-uisclient-arm32:latest
  depends_on:
    - panachesoftware.identity
    - panachesoftware.service.team
    - panachesoftware.service.task
    - panachesoftware.service.foundation
    - panachesoftware.service.file
    - panachesoftware.service.client
  environment:
    - ASPNETCORE_ENVIRONMENT=Development
    - ASPNETCORE_URLS=http://+:80
    - PanacheSoftware__CallMethod__APICallsSecure=False
    - PanacheSoftware__CallMethod__UICallsSecure=False

```

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```
- PanacheSoftware__CallMethod__UseAPIGateway=False
- PanacheSoftware__StartDomain=panachesoftware.com
- PanacheSoftware__Url__IdentityServerURL=http://192.168.86.247:55002
- PanacheSoftware__Url__IdentityServerURLSecure=https://192.168.86.247:44302
- PanacheSoftware__Url__APIGatewayURL=http://192.168.86.247:55003
- PanacheSoftware__Url__APIGatewayURLSecure=https://192.168.86.247:44303
- PanacheSoftware__Url__UIClientURL=http://192.168.86.247:55001
- PanacheSoftware__Url__UIClientURLSecure=https://192.168.86.247:44301
- PanacheSoftware__Url__ClientServiceURL=http://192.168.86.247:55005
- PanacheSoftware__Url__ClientServiceURLSecure=https://192.168.86.247:44305
- PanacheSoftware__Url__FileServiceURL=http://192.168.86.247:55008
- PanacheSoftware__Url__FileServiceURLSecure=https://192.168.86.247:44308
- PanacheSoftware__Url__FoundationServiceURL=http://192.168.86.247:55004
- PanacheSoftware__Url__FoundationServiceURLSecure=https://192.168.86.247:44304
- PanacheSoftware__Url__TaskServiceURL=http://192.168.86.247:55007
- PanacheSoftware__Url__TaskServiceURLSecure=https://192.168.86.247:44307
- PanacheSoftware__Url__TeamServiceURL=http://192.168.86.247:55006
- PanacheSoftware__Url__TeamServiceURLSecure=https://192.168.86.247:44306
- PanacheSoftware__Secret__UIClientSecret=49C1A7E1-0C79-4A89-A3D6-A37998FB86B0
ports:
- "192.168.86.247:55001:80"
restart: always
```

Once all containers are running navigate to **http://192.168.86.247:55001** on any machine connected to the same network to open the Panache Legal Platform. You can use the following details to login (assuming you did not change the **PanacheSoftware__StartDomain** environment variable to a different domain).

Username: admin@panachesoftware.com

Password: PasswOrd123!

CHAPTER 6

Build the project

The main GitHub repository for the Panache Legal Platform can be found [here](#).

Panache Legal is built using .NET Core 3.1 and the C# language. It includes a main solution file that you can open in the [Visual Studio](#), but editing and building the code could also be done using the cross platform Visual Studio Code editor, or another code editor of your choice.

6.1 Prerequisites

The only prerequisites are:

1. [Install](#) the latest .NET Core 3.1 SDK for your platform.
2. [Install Git](#)

Within the [UI Core](#) project [Node](#) and [Gulp](#) are used to import various open source javascript libraries (via [NPM](#)), as well as compile some css files. Although not strictly necessary, as all compiled files and required libraries are included in GitHub, if you want to make changes in this area you should install Node and Gulp and use the provided [package.json](#) file to update node modules.

6.2 Build

This should be as simple as opening the [solution](#) in Visual Studio and running or building the project, or alternatively navigating to the 'src' directory and running:

```
dotnet build .\PanacheLegalPlatform.sln
```