

installation & deployment guide



First Edition, 2020. 2020, Costa Rica. Costa Rica Institute of Technology.

Computer Engineering Academical Area Databases. CE-3101.



This document was redacted with academical purposes.



installation & deployment guide

Jose D. Acuña

Kevin Cordero

Alejandro Ibarra

Jose D. Sánchez

Jesus Y. Sandoval



table of contents

server API & database	1-4
client website	5-7
mobile app	8-9

develop innovation



Pandemica was developed by our team using the latest, most advanced techniques and frameworks available for web development. We are so excited to finally share this guide for all of you back end workers out there, whose task is to bring out services to your customers around the world.

First, a little bit of an introduction to the project structure that we used. There are three main folders in the provided source code.

Web - Standalone website built with Angular framework for TypeScript.

App - iOS app for deliverers built with SwiftUI framework for Swift.

Server - REST API and Database that provides content and information, built with .NET Framework and Microsoft SQL Server.

We'll start the process of installing the website component. It is assumed that there's a dedicated machine where the service will be deployed, already set up for external web domain access.

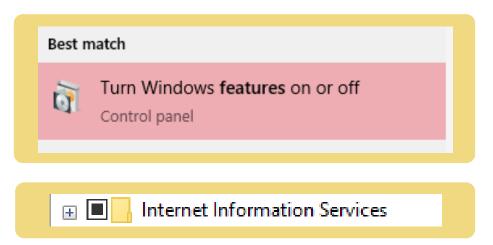
IMPORTANT: If your organization intends on signing up for a third party hosting service like Azure, Firebase or Amazon Cloud, etc., it is recommended that you follow instead the default and updated guide for deployment in those platforms on Angular's website.

server API & database

Pandemica's REST API, was built in ASP.NET with C#, but in order to install it, you will need IIS Manager. The following guide applies only to Windows systems. If your solution requires another OS, contact a member of the team for individual attention.

IIS Manager Instalation:

- 1. Open the Windows Start Menu.
- 2. Type feature and select: Turn Windows features on or off.



- 3. Once you're there, tick Internet Information Services checkbox and click OK.
- 4. Congratulations! You successfully installed IIs Manager.

REST API Installation:

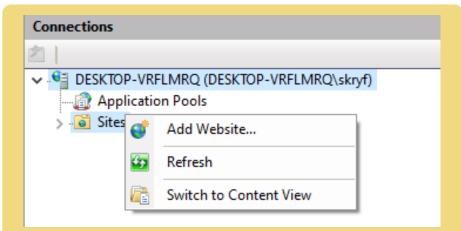
1. Scan the QR Code at the back of this manual, or manually access the following link to download the latest release of our server:

github.com/AlejandroIbarraC/Pandemica/releases

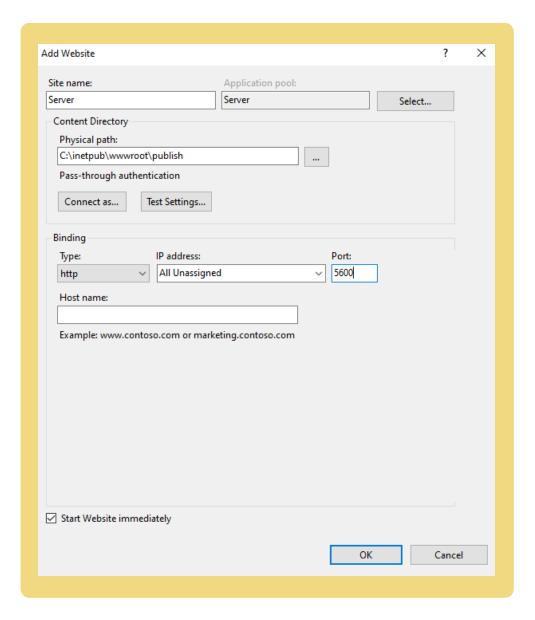
- 2. Unzip the file in local directory: C:\inetpub\wwwroot
- 3. Open the Windows Start Menu.
- 4. Type IIS Manager and click the following icon:



5. Right click on sites and select Add website.



6. In the new window that pops-up, write the site name, and in the physical path entry, search the file that you unzipped previously. Finally, choose a port that's not being used by the computer or network busy.



7. Congratulations! The REST API is now ready to use with Pandemica.

DATABASE INSTALLATION

1. Download the latest version of Microsoft SQL Server and SQL Server Management Studio (SSMS) from the links below:

https://bit.ly/2NrMzI8

https://bit.ly/2Z51EVs

server API & database

2. Scan the QR Code at the back of this manual, or manually access the following link to download the latest release of the database creation scripts.

github.com/AlejandroIbarraC/Pandemica/releases

- 3. Next, double click the file run.bat and enter the name of your PC. By default, it's something like DESKTOP-XXXXX. You may access it by searching for Your PC on the Windows search bar
- 4. The script will run for a few seconds. Finally press any key to exit.
- 6. Hooray! The database is now ready to use with Pandemica.

client website

IIS DEPLOYMENT

This guide applies for deployment using IIS on Microsoft Windows OS on the same machine the server/database that runs the API & database. If you require a different solution, contact a member of the team for individual attention, or read the section titled MANUAL DEPLOYMENT, found below.

1. Scan the QR Code at the back of this manual, or manually access the following link to download the latest release of Pandemica website client:

github.com/AlejandroIbarraC/Pandemica/releases

- 2. Unzip the file in local directory: C:\inetpub\wwwroot
- 3. You should be able to access the website on localhost/Pandemica/ using the browser of your choice. From here it's possible to deploy on a personal domain using IIS.



MANUAL DEPLOYMENT

The first step is to install the required tools to run the Angular framework locally. You'll need a consistent internet connection to download the necessary tools for web deployment.

Install NodeJS from the official website. Either the latest or stable build will work. If the machine you're using to deploy the app is running Windows or macOS, NodeJS comes with a simple installer. For Linux kernel based OSs, you'll need to compile the binaries for install.

nodejs.org

NodeJS comes with a package manager called npm, this will be used to install Angular on your machine. Once NodeJS is installed, run the following command on a Terminal window or the equivalent app to install the Angular web framework.

\$ npm install -g @angular/cli

Next, navigate using the cd command (change directory) to the Web folder in the downloaded project structure, outlined in the first part of this guide. Run the following command to install project dependencies using npm.

\$ npm i

Once all dependencies are downloaded, run the following command to ensure everything works as expected.



\$ ng serve

The Angular web application will be available at the address localhost:4200. If it doesn't visualize correctly, or there's an error with some external dependency, contact a member of our support team for assistance.

Once you made sure everything is in order, run the command below to compile a deployment version calibrated to your domain.

\$ ng build --prod --base-href "your_domain_here"

Replace your_domain_here with the actual web address of deployment domain. This will create a new folder named dist inside the Web folder structure hierarchy. The files inside this new directory are already assigned to your domain.

From here it's just a matter of pushing the compiled website code to the hosting server. This step will depend on your specific hosting solution.

mobile app

We include a complimentary mobile app for health center management called Pandemica Health Center. It was built with the bleeding edge in mobile development frameworks: SwiftUI. This ensures the code and its respective functions remain consistent, lightweight and powerful across the board of devices your employees may be provided with.

There's never been a more advanced mobile delivery experience. We at Schlafenhase are so excited to finally share this incredible feature that will change the way health center management is handled for the whole world.

Pandemica Health Center is ready to be deployed out of the box following the default iOS submission request process. Keep in mind you'll need an Apple Developer account and membership with App Store Connect to request a revision for uploading to the App Store.

The following link provides a comprehensive and updated guide for publishing an iOS app. As this may change in the future, it's better to ensure an up-to-date solution. Keep in mind that general Xcode IDE knowledge is required. The source code can be found on the GitHub project repository, under the folder /Mobile App/PandemicaiOS-Online



developer.apple.com/ios/submit/

NOTE: To set custom URLs for API personal domains, for example, open the file Constants.swift and change the default localhost with the desired IPv4 on line 12.

ANDROID

For all of our Android folks, we also support Pandemica Health Center for your platform. However, there are a few limitations in comparison to the iOS version. We are working hard to provide the same level of productity for everyone, regardless of the mobile operating system anyone chooses to use

We include in our releases a beta version APK of Pandemica Health Center for Android. The link can be found below or by scanning que QR code at the back of this manual. Keep in mind that this version is still in the works and may not function correctly sometimes. For a more stable experience, switch to the iOS version.

Our team would also appreciate any feedback you may be able to offer us to consider for the development of this app. We'd really like to hear from our group of Android users. Thanks! :)

github.com/AlejandroIbarraC/Pandemica/releases

Check out this project's source code on GitHub





scan me

Download the latest release





scan me



installation & deployment guide

Schlafenhase. 2020

