

Architecture Document

[Introduction](#)

[Drawing](#)

[Backend](#)

[Database](#)

[ETL](#)

[MiddleWare](#)

[API](#)

[SB \(Service Bus\)](#)

[Common Projects](#)

[DTO](#)

[API Consumer](#)

[Front End](#)

[Website](#)

[Xamarin](#)

[Xamarin Common](#)

[Xamarin Forms](#)

[Xamarin Android App](#)

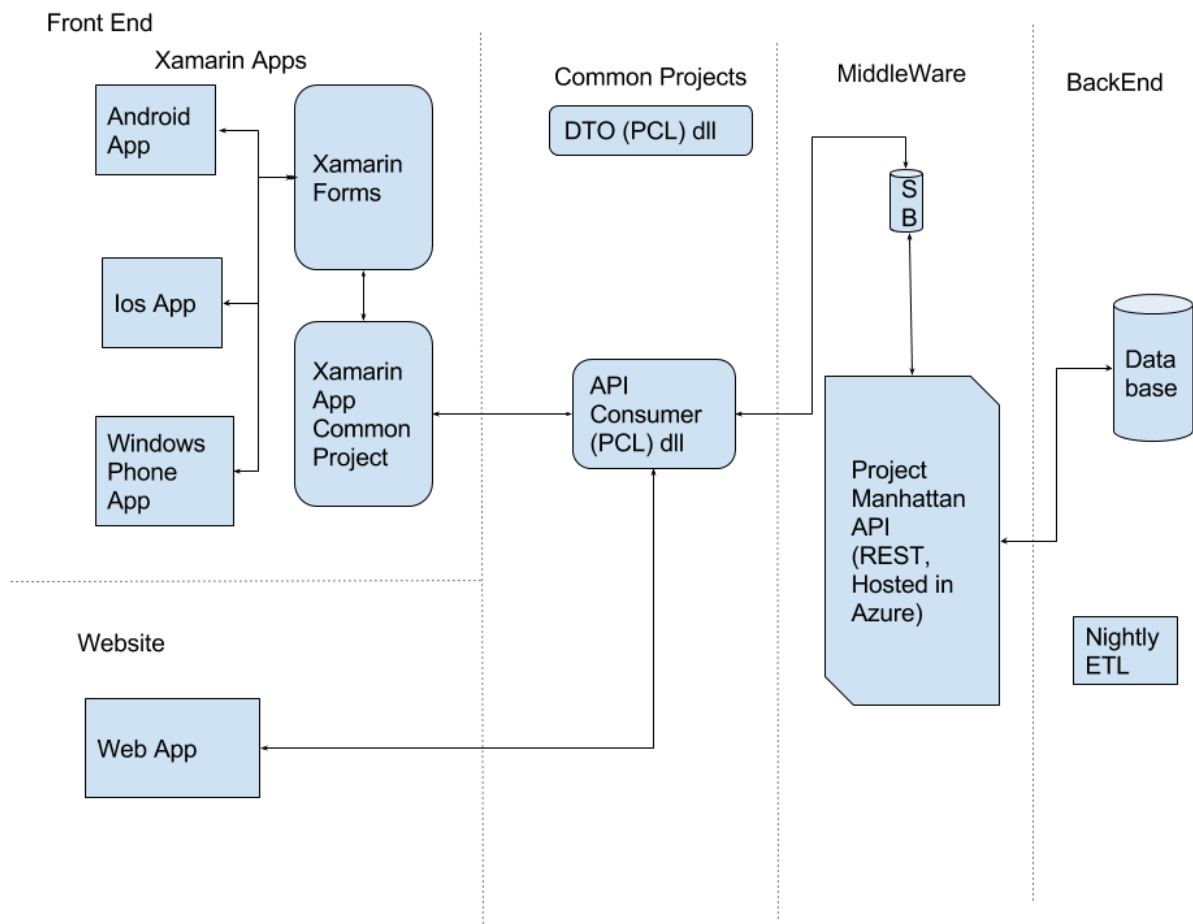
[Xamarin iOS App](#)

[Xamarin Windows App](#)

Introduction

This document details the different parts of the Movie Meter Application. The individual projects/apps/services will be explained at a high level in this document. For in depth understanding on each different piece, please look for its corresponding implementation document.

Drawing



Backend

Database

- Microsoft SQL Database
- Hosted in Azure
- Can be scaled up based on need for speed

ETL

- Nightly ETL process to load information from storage db to display
- Other maintenance ETL process.

MiddleWare

API

- ASP.Net Web API 2
- REST based (no client info)

SB (Service Bus)

- Sits in front of the API
- Stores information regarding the calls
- Execute any required maintenance scripts (User rating calc)

Common Projects

DTO

- Data transfer Objects is a Portable C# library.
- It defines all the common objects to be used across the projects.(including the objects that are to be sent from the web api)

API Consumer

- This is a portable class library that consumes the web api.
- It has calls to get / put data needed per page.
- This project will be used by all the front end applications

Front End

Website

- ASP.Net MVC 5

Xamarin

Xamarin Common

- Base Xamarin Project that uses the API Consumer and creates the data infrastructure

Xamarin Forms

- Common UI Project accross all three OS

Xamarin Android App

- Uses Base Xamarin project and UI element from Xamarin Form to build native android app

Xamarin iOS App

- Uses Base Xamarin project and UI element from Xamarin Form to build native iOSapp

Xamarin Windows App

- Uses Base Xamarin project and UI element from Xamarin Form to build native Windows app