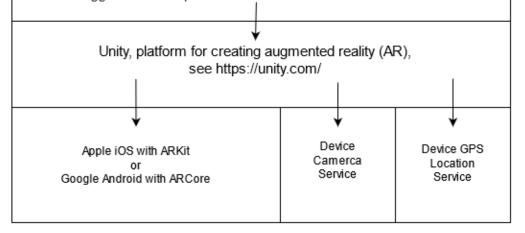


ARpoise App Functionality Overview

The ARpoise client software is based on Unity, the leading platform for creating augmented reality (AR) and virtual reality (VR) content. ARpoise is written in Unity's scripting language, C#. It is Open Source, see https://arpoise.com/

Functionality:

- Retrieves the device location from the location service.
- Contacts the ARpoise Directory Service via https and requests a list of layers available at the location.
- Displays the list of available layers to the user.
- Once the user selects a layer, the software contacts the content creator's web server and downloads the ARpoise layer definition.
- 5. A layer containing an AR experience is made up of one or more individual augments or POIs (Points Of Interest). These are specified in an ARpoise layer definition containing the URL of an Unity AssetBundle. When showing a POI, the ARpoise app downloads this asset bundle and loads the 3D Unity prefab of the POI from it.
- 6. The assets making up an AR experience viewable in ARpoise are downloaded from the content creator's web server as needed, rather than being part of the client app downloaded from the Google Play Store or the Apple App Store. The content creators have to build Unity asset bundles for Android and iOS containing their assets.
- Uses Unity and the camera service to display the downloaded assets in an AR scene.
- POIs shown can either be location based, or linked to an image trigger or can be placed in the world via SLAM.





Ar-vos/ARpoise Network Overview

ARpoise/AR-vos App

There are actually two different apps.

- ARpoise, a location based AR app running on most phones
- AR-vos, a location based, image trigger, and SLAM app using features of ARCore and ARKit and running only on phones that have ARCore or ARKit functionality enabled

Both apps have been implemented for iOS and Android and can be downloaded from the App-Store and the Play-Store

All network traffic is done via standard https requests.

The app contacts the ARpoise Directory Service and requests a list of layers available at the location.

The app displays the list of available layers to the user.

Once the user selects a layer, the app contacts the content creator's web server and downloads the ARpoise layer definition and then the content of the layer. https request containing the latitude and longitude of the device location

JSON Text file describing the layers available at the location

ARpoise Directory Service

- Web service written
 in PHP
- 2. Open Source
- Running on arpoise.com
- The available layers are maintained by us
- Uses XML files for storing available lavers
- For each layer the
 ARpoise layer
 definition contains
 the URL of the
 content creator's web
 server

https requests for downloading the layer's content

> The layer's content

Content Creator's Web Server

- A JSON text file
 defining the layer and
 it's point of interests.
 A layer containing an
 AR experience is
 made up of one or
 more individual
 augments or POIs
 (Points Of Interest)
- 2. Trigger images
- Unity asset bundles containing the assets to be shown