

Vuforia Web Service Guideline

Who is this for?

This is for Developers using Vuforia to develop an Augmented Reality Project that require access to modify a cloud recognition Database

What this includes?

It includes PHP scripts for accessing your Cloud Database, C# Scripts in unity to call those PHP scripts.

External Libraries used

- Gallery Screenshot Manager – To take the screenshot and crop the image for submitting.
<https://www.assetstore.unity3d.com/en/#!/content/7827>
- Vuforia 5.5.9 <https://developer.vuforia.com/downloads/sdk>

Getting Started:

Setting up the php scripts

Requirements

- A website domain to reference for your uploaded PHP scripts. (We used <https://www.namecheap.com/>)
- Hosting service which supports PHP (We are using <https://www.webfaction.com/> for this tutorial)
- FTP Uploading Program (We will use Filezilla) <https://filezilla-project.org/>
- General knowledge of PHP

Prereq:

Go through the following tutorials to make sure you have a cloud database and an app that can connect to the cloud database.

<https://developer.vuforia.com/library/articles/Solution/How-To-Create-a-New-Cloud-Database>

<https://developer.vuforia.com/library/articles/Solution/How-To-Create-a-Simple-Cloud-Recognition-App-in-Unity>

“For the Create Simple Cloud Recognition app you need to migrate the ImageTracker class to Object Tracker” <https://developer.vuforia.com/library/articles/Solution/Vuforia-40-Migration>

Modifying Access and Secret Key for PHP scripts and Unity Scripts.

Files Modified:

- VuforiaClient.php
1. Open the VuforiaClient.php file in Assets/php and change the const ACCESS_KEY and const SECRET_KEY to your databases Access and Secret key. “Note make sure it is set to the server access keys”

Script View

```
<?php

class VuforiaClient {
    const JSON_CONTENT_TYPE = 'application/json';
    const ACCESS_KEY = 'Insert Server Access Key Here';
    const SECRET_KEY = 'Insert Server Secret Access Key Here';
    const BASE_URL = 'https://vws.vuforia.com';
    const TARGETS_PATH = '/targets';
    const SUMMARY_PATH = '/summary';
}
```

Vuforia Database Access Keys

Targets (8)

Database Access Keys

Access Keys are specific to each cloud database. You should never share your access keys with an untrusted party and should take the necessary steps to protect them within your application code.

Client Access Keys

Access Key:

[REDACTED]

Secret Key:

[REDACTED]

The Client Access Keys must be passed to the Vuforia library within the app in order to authenticate itself with the server

Server Access Keys

Access Key:

[REDACTED]

Secret Key:

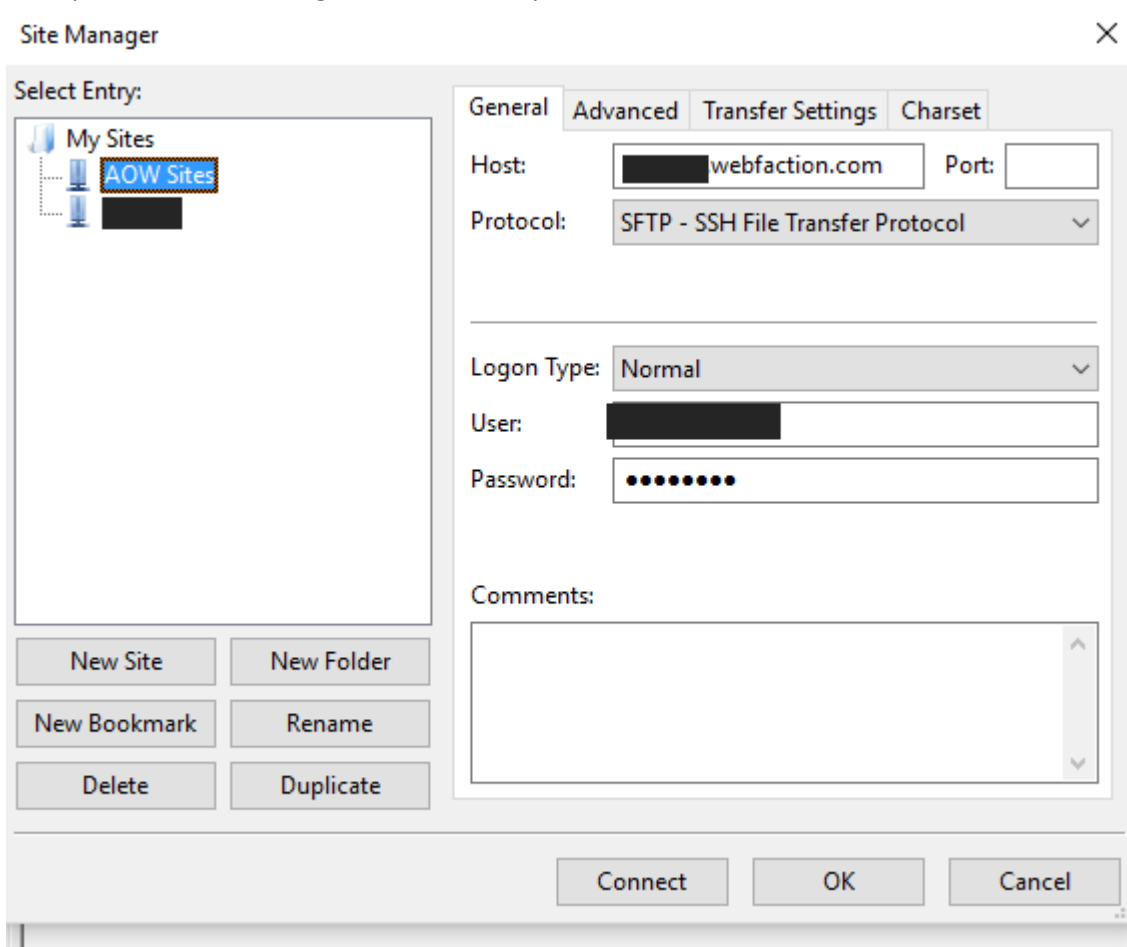
[REDACTED]

Use the Server Access Keys to upload and manage images in your cloud target database, via the REST interfaces

Uploading your scripts onto a website

1. Find your FTP access information for your hosting Provider
 - a. Location of FTP access information on WebFaction <https://docs.webfaction.com/user-guide/access.html>
2. Load up your Filezilla and Connect
 - a. Connect to the host website using ftp access information

Example of webfaction Login info and startup screen



- b. Set your local computer directory to (Unity Project MainDirectory)\Unity project Name\Assets\php

Local site:

Unity Projects\VWS Cloud\Assets\php\

<

- c. Copy the following files to your server in a folder labeled PHP
- crossdomain.xml
 - imageupload.php
 - main.php
 - php.ini
 - VuforiaClient.php

Setting up Unity C# Scripts

- Copy the webaddress for imageupload.php and main.php into the VWSCloudConnector Unity Script: “

```

public class VWSCloudConnector : MonoBehaviour {
    public static VWSCloudConnector instance
    {
        get
        {
            if (_instance == null)
                _instance = GameObject.FindObjectOfType<VWSCloudConnector>();
            return _instance;
        }
    }
    private static VWSCloudConnector _instance;
    string uploadURL = "Insert imageupload.php web address here";
    string mainURL = "Insert main.php web address here";
}

```

Ex: <http://www.YourDomainHere.com/php/imageupload.php>

Ex: <http://www.YourDomainHere.com/php/main.php>

Additional Setups for Preview and target Upload

Setting up UploadImageVuphoria.unity

1. Make sure your AR Camera has an App License Key setup for it.

Setting up PreviewTargets.unity

1. Make sure your AR Camera has an App License Key setup for it.
2. Make Sure Cloud Recognition Access key and Secret key are filled in with the Client Access Keys.

Running the Example Project

1. Add all scenes from AOW Demo Scenes to your Build Settings
 - a. Scene order should be:
 - i. Splash
 - ii. Main
 - iii. Preview Targets
 - iv. About
 - v. Loading
 - vi. Manage Targets
 - vii. UploadImageVuforia
2. Play the Main Scene or build the app for Android.

Any issues please feel free to email ticket@support.augmentourworld.com