



Private Public Partnership Project (PPP)

Large-scale Integrated Project (IP)



Augmented Reality Installation and Administration Guide

Project full title: Future Internet Core

Project acronym: FI-Core

Contract No.: 632893

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Introduction

The purpose of this documentation is to provide information how to install and administer the Augmented Reality Generic Enabler.

System Requirements

Hardware Requirements

The Augmented Reality GE should work on any modern Intel X86 compatible computer and high-end Android based mobile devices.

Operating System Support

The Augmented Reality GE has been tested against the following Operating Systems:

Windows Windows 8 (Desktop) Android version 4.2.2 Ubuntu version 12.04

Software Requirements

Browser Mozilla Firefox 25.0a1 or higher

Software Installation and Configuration

The Augmented Reality GE is a collections of JavaScript source files which have to be included in a web application.

Latest version can be cloned from the repository at <https://github.com/stlemme/FIWARE-AugmentedReality/>.
The repository encloses a demo directory, which contains example applications that show how the needed source files are included. More Detailed information how to use the GE can be found in the Augmented Reality - User and Programmers Guide.

Sanity check procedures

End to End testing

One can test Augmented Reality GE by opening any of the demo or/and test files from the cloned repository, with Mozilla Firefox web browser. Just navigate to the directory where the repository is cloned and start a web server (e.g. 'python SimpleHTTPServer', or 'node.js http-server'). After that, open Firefox browser and navigate to the address where the server is running (e.g. localhost:8000 if it is running on the same device) and click either the Demos or Tests folder. It is recommended to try demos first.

Demos The demo folder includes four demos in subfolders 'AR_POI', 'house', 'markerDetection' and 'plane'. Each subfolder has an index.xhtml file, which starts the demo.

Tests The tests folder includes two test suit files, 'Location_based_regAndTrack_unitTest.html' and 'Vision_based_regAndTrack_unitTest.html'.

List of Running Processes

N/A

Network interfaces Up & Open

N/A

Databases

N/A

Diagnosis Procedures

Resource availability

N/A

Remote Service Access

N/A

Resource consumption

The amount of resources used by the Augmented Reality GE vary a lot depending on the AR application, RAM in respect of the 3D content in a virtual scene and CPU in respect of marker tracking and rendering.

Example of resource consumption: Amount of resources used in tracking markers at 25 fps speed using the following setup. HP EliteBook 2760p, CPU: Intel i5-2540M, 4 GB RAM, GPU: Intel HD Graphics 3000, 1,6 GB RAM, Operating system: windows 8, Browser: Mozilla Firefox 28.0a1

Device	CPU usage	Ram usage
HP EliteBook 2760p	38%	200 MB

I/O flows

N/A