Device Characterization Platform 1.0.0

API Installation Guide

DCP-API-Installation-Guide-1.0.0

Octtober 5, 2019

**Revision history**

| **Revision** | **Date** | **Description** |
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# Introduction

## Purpose & Scope

This document provides:

* Installation instructions for the Device Characterization Platform.
* Instructions for running test commands to verify DCP API installation.

## Definitions, Acronyms & Abbreviations

Table -Definitions, Acronyms & Abbreviations

| Term | Explanation |
| --- | --- |
| DCP | Device Characterization Platform |
| OS | Operating System |
| PostgreSQL | PostgreSQL open source object-relational database system |
| Apache | Apache open-source cross-platform web server software |

## References

N.A

## Getting Started

The instructions provided in this document assume that the required equipment (hardware, software) has been installed and configured with Ubuntu 16.04. Refer to the [Ubuntu Installation Guide](https://help.ubuntu.com/lts/installation-guide/i386/install.en.pdf) for additional installation help.

The installer should be familiar with Linux command line.

# Installation

1. The reader acknowledges and agrees that he is entirely and solely responsible for the selection and use of all third-party software modules downloaded and installed by this installation method, including securing all appropriate and proper rights of use to any of such third-party software modules and to comply fully with any terms of use that may apply to or accompany any such third-party software modules.

Qualcomm Technologies, Inc. does not undertake any obligations, duties, or other responsibilities in connection with the selection or use by the reader of any of such third-party software modules.

## System Requirements

### Software Requirements

* PHP 7.1 or greater
* Laravel 5
* Ubuntu 16.0
* Apache 2
* PostgreSQL 10
* Composer

### Hardware Requirements

Minimum hardware requirements

* At least 512 MB of RAM
* At least 1G of disk space

### Operating System

This subsystem will be installed and configured with Ubuntu 16.04. Refer to the [Ubuntu Installation Guide](https://help.ubuntu.com/lts/installation-guide/i386/install.en.pdf) for additional installation help.

### Database Support

1. Creating a new database from scratch assumes that you are already running a PostgreSQL instance.

A complete guide for PostgreSQL installation and configuration can be found on [PostgreSQL website](https://www.postgresql.org/)

## Extracting Software Release

The DCP software release is distributed as a tar.gz file. To extract the contents of the  
distribution, run:  
tar xvzf DCP\_API.tar.gz

* Download or clone the repository from git

git clone <https://github.com/CACF/DCP_API>

* Copy the contents to the web root directory e.g. /var/www/html (default Apache2 web root directory)

## Manual Installation

* Ensure the APT package index is updated

apt-get update --fix-missing

* Install apache server

apt-get install apache2 libapache2-mod-php

* Install PHP 7.2 with required packages for Laravel 5.5

apt-get install php7.2 php7.2-fpm php-pear php7.2-curl php7.2-dev php7.2-gd php7.2-mbstring php7.2-zip php7.2-xml php7.2-pgsql php7.2-sqlite

* Install Composer

apt-get install composer

# **Configuration**

* Go to path /var/www/html/dvs\_staging\_api

cd /var/www/html/DCP\_API\_api/

* Update all third party dependencies

Composer Install

* For GSMA API configurations run

php artisan setup:api --wco

* Migrate the database

php artisan migrate –-seed

* Change the ownership of web root directory

chown -R www-data:www-data /var/www/html/DCP\_API

* Change permissions of the web root:

|  |
| --- |
| sudo chmod -R 755 /var/www/html/DCP\_API  sudo chmod -R 777 /var/www/html/DCP\_API/storage |

## Apache2 Configuration

Make changes in apache2 configuration in order to serve API

* Go to path /etc/apache2/sites-available

cd /etc/apache2/sites-available/

* Edit configuration file “default.conf”

nano 000-default.conf

* Change the document root in “default.conf” file

DocumentRoot /var/www/html/DCP\_API/public

* Add following lines in server block under “Document Root”

|  |
| --- |
| <Directory var/www/html/DCP\_API/public>  Options Indexes FollowSymLinks MultiViews  AllowOverride All  Require all granted  </Directory> |

* Enable rewrite module in apache2

sudo a2enmod rewrite

* Enable PHP 7.2 module in apache2

sudo a2enmod php7.2

* Restart apache service

service apache2 restart

# **Testing**

* To verify the installation, visit server IP on browser i.e. http://your\_server\_IP\_address
* To check apache configurations for errors

apachectl -t