



Device Characterization Platform 1.0.0

API Installation Guide

DCP-API-Installation-Guide-1.0.0

October 5, 2019

Revision history

Revision	Date	Description
A	October 2019	Initial release

Contents

- 1 Introduction4**
 - 1.1 Purpose & Scope 4
 - 1.2 Definitions, Acronyms & Abbreviations 4
 - 1.3 References 4
 - 1.4 Getting Started..... 4
- 2 Installation5**
 - 2.1 System Requirements 5
 - 2.1.1 Software Requirements 5
 - 2.1.2 Hardware Requirements..... 5
 - 2.1.3 Operating System..... 5
 - 2.1.4 Database Support..... 5
 - 2.2 Manual Installation 6
- 3 Configuration7**
- 4 Testing9**

Tables

- Table 1-Definitions, Acronyms & Abbreviations4

1 Introduction

1.1 Purpose & Scope

This document provides:

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

1.2 Definitions, Acronyms & Abbreviations

Table 1-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

1.3 References

N.A

1.4 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](#) for additional installation help.

The installer should be familiar with Linux command line.

2 Installation

NOTE: 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.

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2.1 System Requirements

2.1.1 Software Requirements

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

2.1.2 Hardware Requirements

Minimum hardware requirements

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

2.1.3 Operating System

This subsystem will be installed and configured with Ubuntu 16.04. Refer to the [Ubuntu Installation Guide](#) for additional installation help.

2.1.4 Database Support

NOTE: 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](#)

2.2 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)

2.3 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
```

3 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
```

3.1. 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
```


4 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`