OTGC
Onboarding Tool and Generic Client
Hands-on Training of OTGC

OCF EU Developer Training 2019

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Terms and Definitions (1)

• **Onboarding Tool (OBT)**
  A logical entity within a specific IoT network that establishes ownership for a specific device and helps bring the device into operational state within that network. A typical OBT implements DOTS (Device Owner Transfer Service), AMS (Access Management Service) and CMS (Credential Management Service) functionality.

• **Onboarding Tool and Generic Client (OTGC)**
  A logical entity that implements the functions of an OBT and a Generic Client.

• **Onboarding**
  Process that consists in owning an OCF device by the OTGC.

• **Offboarding**
  Process that consists in releasing an OCF device owed by the OTGC.
Terms and Definitions (II)

• **OCF Server**
  A sensor or actuator capable to generate a measurement or perform an action.

• **OCF Client**
  A device capable to scan and control OCF Servers.

• **OCF Device**
  A device (Server or Client) that can be integrated into an OCF network created by the OTGC. The OTGC will transfer ownership to this OCF Device by different OTM (Onboarding Transfer Methods).
Architecture

OTGC main code (C / C++)

OS dependent code (Android)
OS dependent code (iOS)
OS dependent code (Windows)
OS dependent code (Linux)
OTGC Resources

**OTGC binaries** available publicly at OCF GitHub Developers Area:

https://github.com/openconnectivityfoundation/development-support/tree/master/otgc

Current version v1.2.0 available for Android
Current version v1.3.0 available for Linux OS.

**OTGC sources** available publicly at OCF GitHub:

OTGC Android ➔  https://github.com/openconnectivity/otgc-android
OTGC Linux ➔  https://github.com/openconnectivity/otgc-linux
OTGC IoTivity ➔  https://github.com/openconnectivity/1.3-rel-iotivity-otgc

OTGC is an open source code so can be modified by manufacturers to incorporate proprietary features and or branding graphical material.
OTGC Installation

Permissions

In order to ensure that the application can be executed correctly, we need the following permissions:

Location: to display the list of available Wi-Fi networks.
Storage: to create databases for security’s management.

DENY   GRANT

Allow OTGC to access this device’s location?

1 of 2   DENY   ALLOW

Allow OTGC to access photos, media, and files on your device?

2 of 2   DENY   ALLOW
OTGC Scanning + Onboarding

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OTGC Device Operation (IV)

Device name
OCF Developer kit

Spec version url
ocf.1.0.0

Device ID
12345678-1234-1234-1234-123456789012

Data model
ocf.res.1.0.0.ocf.sh.1.0.0

Protocol independent ID
bbe97358-69c5-46c6-8160-241a0d095683

Localized descriptions

Software version

Manufacturer name

Model number