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|  | Project acronym: **IoTrust**  Project title: **Secure trust bootstrapping and peer to peer network connection in the Internet of Things**  Third Party: **DW/ODINS**   |  |  | | --- | --- | | Digital Worx GmbH (DW) - Germany |  | | Odin Solutions SL (ODINS) - Spain |  |   Deliverable D.2  Open Standards based IoTrust Development   |  |  | | --- | --- | | **Deliverables leader:** | **Odins Solutions SL (ODINS)** | | **Authors:** | Silke Capo, Mihaly Virag, Mirko Ross, Rafael Marin-Perez, Antonio Skarmeta Gomez, | | **Due date:** | 31-03-2021 | | **Actual submission date:** | 25-03-2021 | | **Dissemination level:** | Public / confidential | |

Abstract: Please provide a brief description

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Nb: The deliverable structure below is only provided for guidance and you may adapt in a free form manner the structure to fit your needs.

# Introduction

Shortly introduce the objective of the deliverable within the overall implementation of your project, explaining how it is inter-related to other deliverables, outputs or milestones.

# Activities carried out to complete the deliverable

Shortly summarise the activities undertaken to produce the deliverable and how you addressed any technical or other unforeseen issues that may have arisen.

# Technical description

Describe briefly the key technical characteristics of the deliverable and explain how they are related to the final results expected to be achieved by the project.

You can choose to include or annex relevant documents, mock-up, weblinks, screenshots, etc).

## FUOTA and Trust Monitoring

It is the second critical component of the IoTrust project after the bootstrapping. It focuses on facilitating security patches to the IoT devices and generate dynamic trust score. This is all accomplished by multiple open-source technical components. The following sections give more details about them.

### Blockchain

The Blockchain is employed to store critical device and firmware information in an immutable and distributed ledger. It is chain of blocks which are sequentially linked with cryptographic methods. Each block has cryptographic hash of its parent block.

Block

Blockchain diagram

Deployment

### IPFS

InterPlanatery File System (IPFS) is a peer-to-peer storage network.

### Customer Platform

The customer platform facilities a dashboard to manage and control IoT devices and their firmware.

# Conclusions and next steps

Outline any conclusions on the results achieved and any lessons learned for the next stage of the project.

Describe briefly the next steps in the project development and how you will build on this deliverable to complete the work.

Appendix

* E.g. mock-ups, screenshots
* References
* Etc.