

---

# **CERC persistence reference manual**

***Release 0.1.0.4***

**CERC Next-Generation Cities**

**Mar 25, 2024**

# CONTENTS:

<b>1</b>	<b>CERC PERSISTENCE' reference manual</b>	<b>1</b>
1.1	Authors . . . . .	1
1.2	Contributors . . . . .	1
1.3	About the PERSISTENCE . . . . .	1
1.4	Folder structure . . . . .	2
1.5	Model Classes . . . . .	3
1.5.1	Application . . . . .	3
1.5.2	City . . . . .	3
1.5.3	CityObject . . . . .	3
1.5.4	SimulationResults . . . . .	3
1.5.5	User . . . . .	3
1.5.6	UserRoles . . . . .	3
1.6	Repository Classes . . . . .	3
1.6.1	Application . . . . .	3
1.6.2	City . . . . .	3
1.6.3	CityObject . . . . .	3
1.6.4	SimulationResults . . . . .	3
1.6.5	User . . . . .	3
1.7	Classes . . . . .	3
1.7.1	Configuration . . . . .	3
1.7.2	DB Control . . . . .	3
1.7.3	DB Setup . . . . .	3
1.7.4	Repository . . . . .	3
<b>2</b>	<b>Additional Files</b>	<b>4</b>
2.1	Readme . . . . .	4
2.2	License . . . . .	4
2.3	Code of conduct . . . . .	4
2.4	How to contribute . . . . .	4
2.5	Coding style . . . . .	4

---

CHAPTER  
ONE

---

## CERC PERSISTENCE' REFERENCE MANUAL

### 1.1 Authors

- Guillermo Gutierrez Morote
- Pilar Monsalvete Alvarez de Uribarri

### 1.2 Contributors

- Seyedehrabeeh Hosseinihaghghi
- Milad Aghamohamadnia
- Peter Yefi
- Koa Wells
- Sanam Dabirian
- Soroush Samareh Abolhassani

### 1.3 About the PERSISTENCE

This document contains the essential documentation for the CERC PERSISTENCE, a set of classes, factories, and helpers that simplifies the research at urban scale in multiples domains; these components are designed around three central axes, **extensibility**, **code clarity** and **consistency** as we intend to allow domain experts to perform urban scale simulations with multiple programs and enrich the city from several data sources. PERSISTENCE is composed of four main components: **repositories** and **models**.

## 1.4 Folder structure

```
..cerc_persistence/cerc_persistence/
├── configuration.py
├── db_config.py
├── db_setup.py
└── __init__.py
    ├── models
    │   ├── application.py
    │   ├── city_object.py
    │   ├── __init__.py
    │   ├── int_.py
    │   └── simulation_results.py
    ├── user.py
    └── repository
        ├── application.py
        ├── city_object.py
        ├── __init__.py
        ├── simulation_results.py
        ├── user.py
        └── repository.py
└── version.py
```

3 directories, 18 files

## 1.5 Model Classes

1.5.1 Application

1.5.2 City

1.5.3 CityObject

1.5.4 SimulationResults

1.5.5 User

1.5.6 UserRoles

## 1.6 Repository Classes

1.6.1 Application

1.6.2 City

1.6.3 CityObject

1.6.4 SimulationResults

1.6.5 User

## 1.7 Classes

1.7.1 Configuration

1.7.2 DB Control

1.7.3 DB Setup

1.7.4 Repository

---

CHAPTER  
**TWO**

---

## **ADDITIONAL FILES**

### **2.1 Readme**

README.md

### **2.2 License**

LICENSE.md

### **2.3 Code of conduct**

CODE\_OF\_CONDUCT.md

### **2.4 How to contribute**

CONTRIBUTING.md

### **2.5 Coding style**

PYGUIDE.md