

#### FAKULTÄT FÜR INFORMATIK

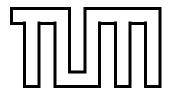
DER TECHNISCHEN UNIVERSITÄT MÜNCHEN

Master's Thesis in Informatics

# A Publish/Subscribe System for Distributed Optimization

Aleksandar Stoimenov





#### FAKULTÄT FÜR INFORMATIK

#### DER TECHNISCHEN UNIVERSITÄT MÜNCHEN

#### Master's Thesis in Informatics

## A Publish/Subscribe System for Distributed Optimization

## Ein Publish/Subscribe System für verteilte Optimierung

Author: Aleksandar Stoimenov

Supervisor: Prof. Dr. rer. pol. Hans-Arno Jacobsen

Advisors: Martin Jergler, M.Sc.

Dipl.-Ing. Jose Adan Rivera Acevedo

Date: November 14, 2013



Ich versichere, dass ich dieses Master-Th gegebenen Quellen und Hilfsmittel verw	nesis selbständig verfasst und nur die anvendet habe.
I confirm that this master's thesis is m	y own work and I have documented all
sources and material used.	
Munich, November 14, 2013	Aleksandar Stoimenov

#### **Abstract**

#### **Contents**

<b>A</b> l	bstract	vii
Ta	able of contents	ix
1	22102 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1
	1.1 Motivation	. 1
	1.2 Problem Statement	. 1
	1.3 Structure of this thesis	. 1
2	Preliminaries	3
3	Example	5
Li	ist of Figures	7
Bi	ibliography	9

#### 1 Introduction

- 1.1 Motivation
- 1.2 Problem Statement
- 1.3 Structure of this thesis

### 2 Preliminaries

#### 3 Example

#### A citatation goes like this [1]

```
public class OVF.EV extends ControllableDevice {
   public static final double EV.THRESHOLD = 0.001;
   private DopsVector value;
   private double requiredEnergy;
   private double lowerChargingBound = 0;
   private double upperChargingBound = 4;

public void initialize(File file) {
    MatFileReader mfr = new MatFileReader(file);
    MLDouble driveP = (MLDouble) mfr.getMLArray("d"); // driving profile
    drivingProfile = MatrixUtil.getFirstRow(driveP.getArray(), driveP.getN());
    MLDouble requiredE = (MLDouble) mfr.getMLArray("R"); // required energy
    requiredEnergy = requiredE.getArray()[0][0];
   value = new DopsVector(0);
}

public DopsVector getValue() {
   return value;
}
```

Listing 3.1: Implementation of Electric Vehicle for OVF.

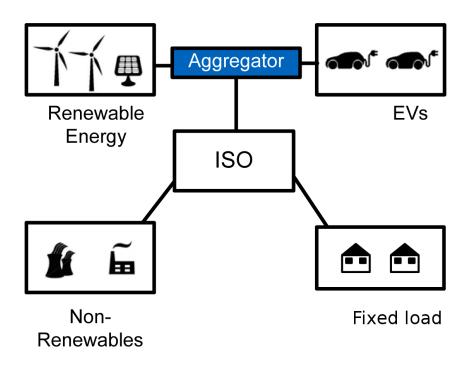


Figure 3.1: Long caption. Displayed below the figure

## **List of Figures**

3.1	Short caption for List of Figures																							6
-----	-----------------------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	---

### **Bibliography**

[1] Leslie Lamport. LaTeX: A Documentation Preparation System User's Guide and Reference Manual. Addison-Wesley Professional, 1994.