



**LUNDS UNIVERSITET**  
Lunds Tekniska Högskola

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# Optimizing business intelligence extraction speed from an ERP-system's database

(Master Thesis)

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## Abstract

**ToDo:**

**Keywords:** MSc, MsSQL, ERP, Optimization



# Acknowledgements

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**ToDo:**



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# Chapter 1

## Introduction

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2014 was the year of the cloud. Software companies strived to make their services cloud based in order to meet the increasing demands from the market of availability and reliability. In today's businesses there's high demand for accurate and up-to-date business intelligence.



# **Chapter 2**

## **Background**

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### **2.1 Background**

### **2.2 Problem description**

### **2.3 Thesis Goals**

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### **2.4 Scope**

The time frame of a master thesis is limited and therefore work limitations have to exist. The system consists of several essential parts, all of which can be optimized in different extent. The focus of this thesis's is speed optimization of business intelligence reports and therefore the following limitations have been established:

- The optimization will not effect the systems front-end other than the speed of report generation.
- The optimization will not effect the original structure of the systems database.
- The optimization will not change the logic of the queries made by the back-end to the database.
- The optimization should be versatile enough to handle future database expansions and higher performance of the system. However, in the scope of this master thesis only estimations based on the current system can be done.

## **2.5 Related Work**

## **2.6 Contributions**

## **Chapter 3**

# **Research Questions & Methodology**

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### **3.1 Research Questions**

### **3.2 Methodology**

### **3.3 Work**



# **Chapter 4**

## **Approach**

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### **4.1 Technical Description**

### **4.2 Database**

Database schema link





# **Chapter 5**

## **Proposed Solution**

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### **5.1 Solution Introduction**

### **5.2 Integration**



# **Chapter 6**

## **Software Development & Testing**

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# **Chapter 7**

## **Discussion**

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# **Chapter 8**

## **Conclusions**

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