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1 Introduction and Motivation

1.1 Research Methodology

1.2 Related Work

2 Workflow Management Systems

2.1 Workflow

2.2 Typical Architecture of a WFMS

3 Docker

3.1 Functionality

3.2 Software containers

3.3 Docker Ecosystem

4 Application Design

4.1 Problem Identification

4.2 Derivation of Objectives

4.2.1 Functional Requirements

Infrastructure and Infrastructure Management

Workflow Modeling

Workflow Distribution

Workflow Execution

Integration of Third Party Containers

4.2.2 Intangible Requirements

“It should be easier to use”

4.3 Architecture

4.3.1 Application Architecture

4.3.2 Workflow Execution Environment

4.3.3 Workflow Management Environment

4.3.4 Developer Client

4.3.5 User Client

5 Prototypical Implementation

5.1 Toolchain

5.2 Realization of the Architecture

Any Compromises here?

6 Evaluation and Discussion

7 Conclusion

Bibliography