[[1]](#footnote-1)

Redesign einer Chat-Anwendung als verteiltes System.

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# Motivation und Problemstellung

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# Einführung

## Transaktionen in verteilten Systemen

### Eigenschaften

### Herausforderungen

## Java Messaging Service

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### JMS-Provider

### JMS-Destinations

# Konzeption der verteilten Chatanwendung

Ausgehend von der zu Beginn bereitgestellten Chatanwendung, gilt es eine, für ein verteiltes System optimierte Anwendung zu erstellen. Durch diese Änderung der Anforderungen, ist die bisherige monolithische Struktur nicht passend. Es galt daher, die Architektur neu zu überdenken. Im nachfolgenden ist daher ein technisches Konzept für die veränderte Umgebung und die grundlegende Architektur für die beiliegende Chatanwendung beschrieben.

## Struktur des Anwendungsszenarios

## Komponentensicht

## Datenmodell

## Fehlertolerante Transaktionsverarbeitung für REST-Clients

# Implementierung

## Umsetzung der Basisarchitektur

### Ablösung des TCP-Websocket durch JMS

### Umsetzung der REST-APIs

* JAX-RS / Jersey

### Anbindung der Datenbankinstanzen

## Umsetzung einer gemäß XA verteilten Transaktion

* EJB

## Umsetzung eines Admin-Clients

### Angular2 als Entwurfsentscheidung

# Benchmarking

## Testaufbau und Rahmenbedingung

### Verwendete Infrastrukturkomponenten

### Verwendete Testmetriken

### Testspezifikation

## Dokumentation der Messergebnisse

## Evaluation der Messergebnisse

# FAZIT

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Appendix

Appendixes, if needed, appear before the acknowledgment.

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References

[1] „Messaging configuration - WildFly 8 - Project Documentation Editor“. [Online]. Verfügbar unter: https://docs.jboss.org/author/display/WFLY8/Messaging+configuration. [Zugegriffen: 13-Okt-2016].

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