

# DISTRIBUTED REACTIVE SOFTWARE SYSTEMS (DRESS)





Lecture and Exercises
6 Credit Points, 4 SWS

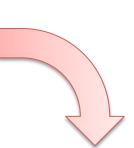
## **Overview**

Many of today's software systems rely on predictable and stable information flows. Due to the digitalization of the world, these flows become increasingly more complex and dynamic. Thus, tomorrow's software systems have to become more distributed and reactive. Those Distributed Reactive Software Systems (DReSS) are best realized with **event-based systems**.

# **Application Example:** Event-based Applications in Logistics



environmental effects impact logistics





In these situations, event-based systems help to dynamically react. Integrating all the different flows of information is critical for surviving those unforeseen situations.

### Topics in this course include:

Applications of Event-based Systems
Event Detection
Event Composition
Complex Event Processing (CEP)
Notification Mechanisms
Event Lifecycle
Mobility
Software Engineering of Event-based Systems

# **General Information**

#### **Objectives**

Discuss **state of the art research** in the exercise sessions.

**Hands-on experience** in implementing a ready-to-use event-based system.

The system will process **real-time event data** from our sensors.

#### Language

Lecture will be held in English Exercises will be held in German and English



# **Organization and Contact**

Course URL: http://www.dvs.tu-darmstadt.de/teaching/dress/

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