# Online Failure Management

## Description

Despite the improvements of the software development and maintenance processes in the last decades, failures at runtime are still inevitable due to the increasing complexity of nowadays systems. A short outage of a critical service could cause catastrophes for both economy and lives. Online failure management is an approach which aims to counteract the problems that occur at runtime so that the system can continue to operate normally. Online failure management includes two main steps. First, the pending problems that are going to occur at runtime need to be predicted and identified before they actually occur. Second, when the failures can be expected, failure avoidance techniques have to be applied to prevent the failures from occurring and causing other components to fail which may result in a total system outage. This seminar topic should investigate the approaches and techniques which can be used for both steps of online failure management.

## References

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## Contacts

Lars Grunske (`grunske@informatik.hu-berlin.de`)
Software Engineering Group
Institut für Informatik
Humboldt-Universität zu Berlin