Presentation



Approach Based Patterns for System-of-Systems Reconfiguration

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Architectural Engineering Process



Motivation

SoS engineering constraint:

- lack of coercif power on the environnement
- some design conception are reported at runtime

Problem:

- how to maintain pattern in the concrete architecture?
- how to evolve the set of pattern define in SoS?

Approach:

 pattern to formalize a set of best practice to assist reconfiguration



Plan

- Introduction
- 2 Background
 - Ontologie
 - Example
- Patterns For SoS Reconfiguration
 - Reconfiguration cases
 - challenge
 - approach
- Related Works
- Conclusion





SoSADL

System constituents of a SoS

Mediator communicating elements that specify the interactions among systems. Mediators belong to the SoS, i.e., the SoS has full control over them.

Coalition identifies systems and controls mediators



emergency service SoS



followed patterns



Reconfiguration cases challenge approach

maintain patterns



Reconfiguration cases challenge approach

pattern evolutions



Reconfiguration cases challenge approach

difficulty



Reconfiguration cases challenge approach

solution and advantages





Challenge and Futur Work

