

business processes and parameters

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ongoing work

- BPMN verification mainly with **behavioral models**
Petri nets, process algebras, LTS
- **trend** BPMN + data (eg, ICSOC'17, WBSP'17)
relation between data & parameters ?
- **[late]** ongoing work on **FOL semantics** for BPMN^{+d}
then target SMT-lib, TLA+, Cubicle
- continue to gather & develop **case studies**
objective is a parametric WF DSML @t0+12

remarks on the deliverable

- BPMN \neq TLA+ / Cubicle
- remove *ShiftWorker*
- unify versions of *EMS*
- add variants of *eConference* (new)

eConference

- **conference management system**
very simplified version of easychair, conftool, etc
- **illustrate** parameters
- study the **impact** of these parameters

numerical parameters

- **process-related** numerical parameters
#pc-chair (1+), #pc-member (1+), #author (0+)
- **process vs. user**
one can be both pc-member and author
a process = a pid (as in distributed algorithms)
a user = some id (using an associated data model)
- **data-related** numerical parameters
every paper is reviewed by n_1 to n_1' reviewers
every reviewer will review at most n_2 papers

functional parameters

- **communication** parameters **apply ... in theory**
what do BP engines implement?
does one has the possibility to use a specific communication / queue policy in an engine?
- role of **topologies** unclear in BPMN
pool lanes? (explicit relations, not parameters)
extension? (communication type $X \leftrightarrow X$)
- **choreographies**: a better framework?
parameter for the semantics of sequencing
distributed algorithms are not given as choreographies

data related parameters

- we have seen **numerical parameters** earlier on
- kinds of **collections**
 - list: ordered, duplicates*
 - set: no order, no duplicates*
 - impact?*

failure parameters

- shouldn't #failures + failures model be **regrouped**?
- general-purpose process failure is **too general**
- need for **pool-level failure parameters**
failure of pc-chair / pc-member: not same impact
- process vs. user **again**?
*the BP engine of reviewer X is working,
he just decides to send a subset of his reviews*

service parameters

- BP may rely on **external services**
to what extend parameters for these services have an impact / should be taken into account?
- **transactional** properties
atomic - retrievable - compensatable
- relation with failure model?