How to repair multi-agent plans without altering the satisfaction of the initials constraints

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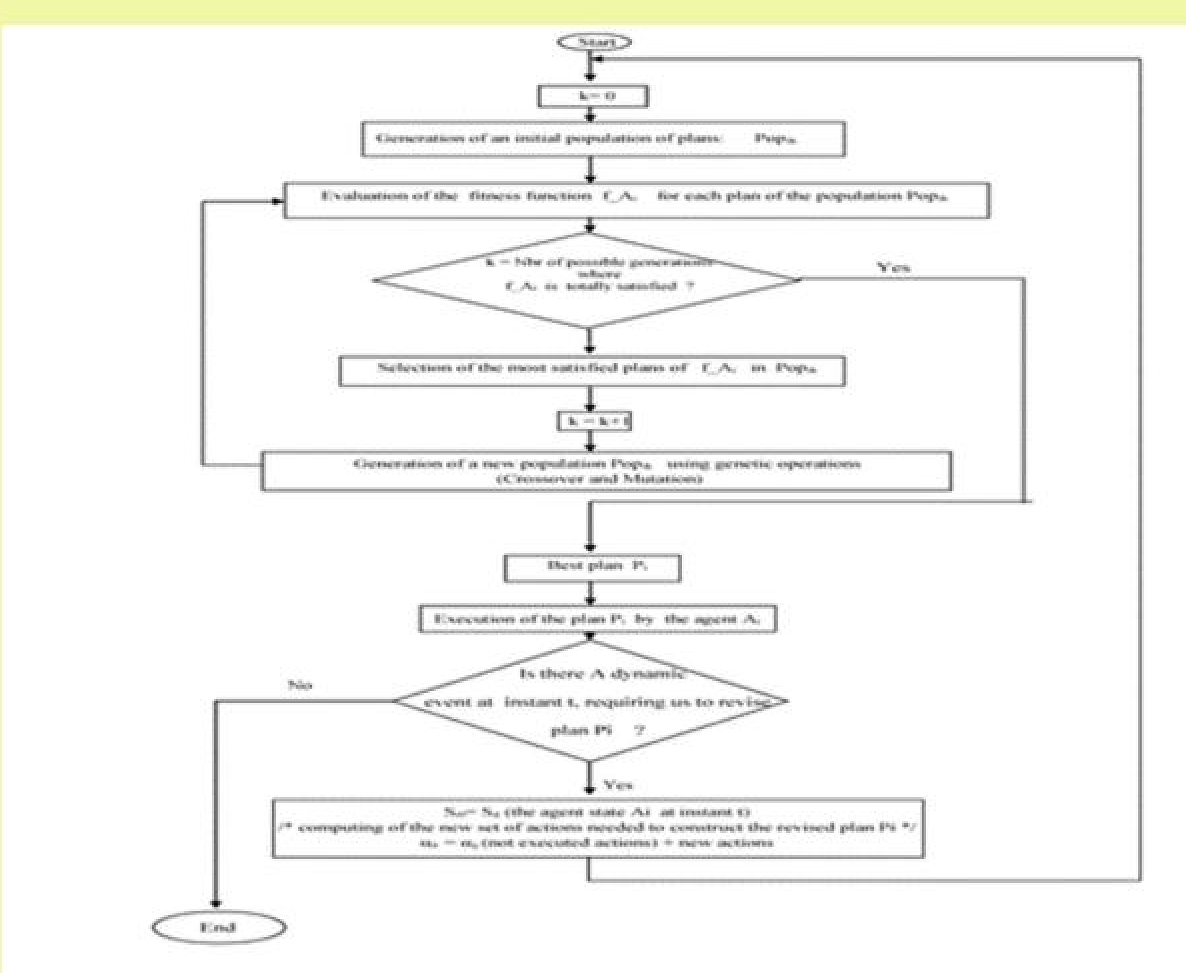
ABSTRACT

Our approach is to repair multi-agent plans, whenever there is a change in its set of actions to plan caused by the unpredictable changes of the environment. This, without altering the satisfaction of the initials constraints. The obtained results will be compared with the results obtained by the complete regeneration [1].

1. INTRODUCTION

[illegible]

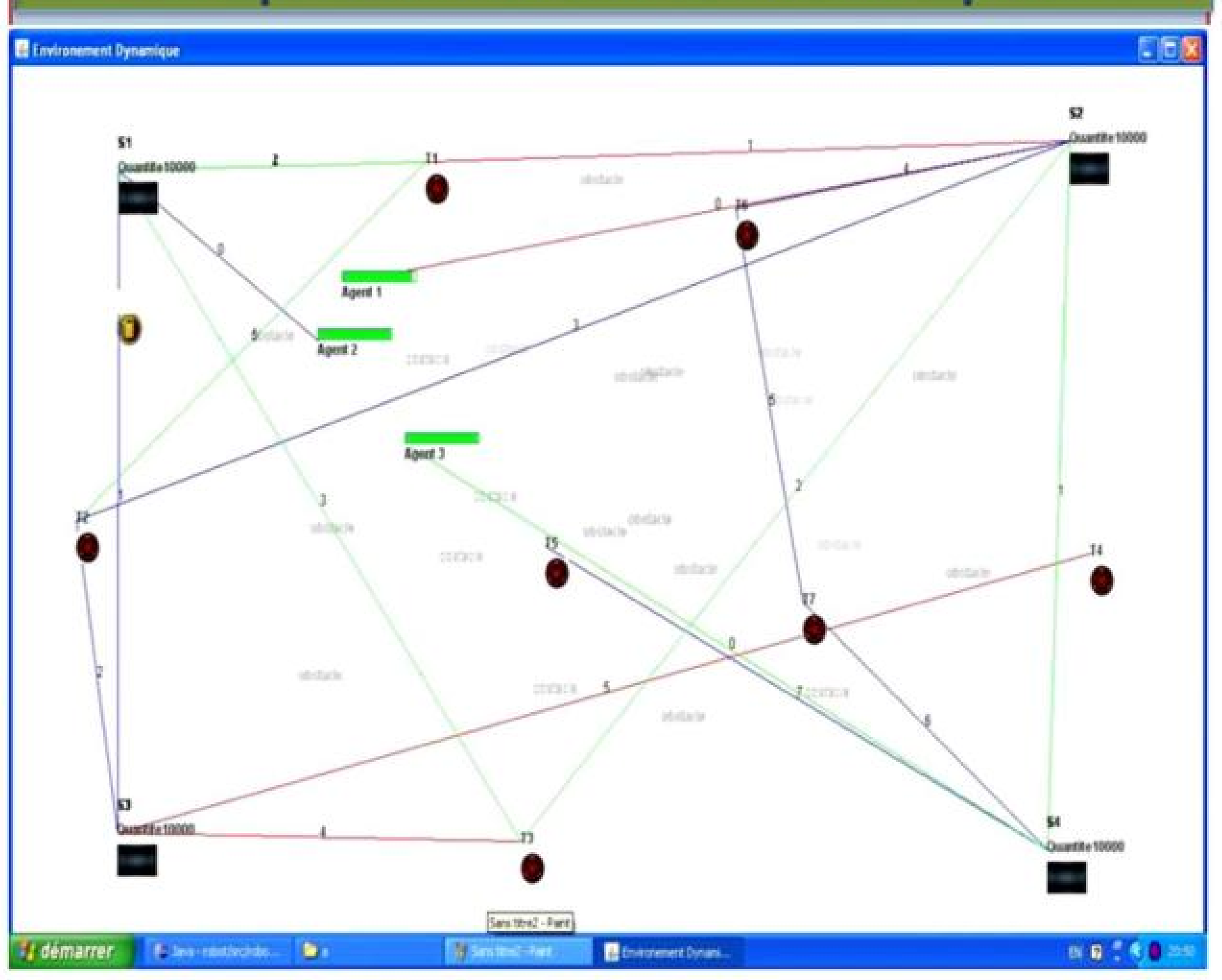
2. The proposed approach



[illegible]

3. The system state at the instant t0

4. Representation of the initials plans



5. Repairing the initial plans

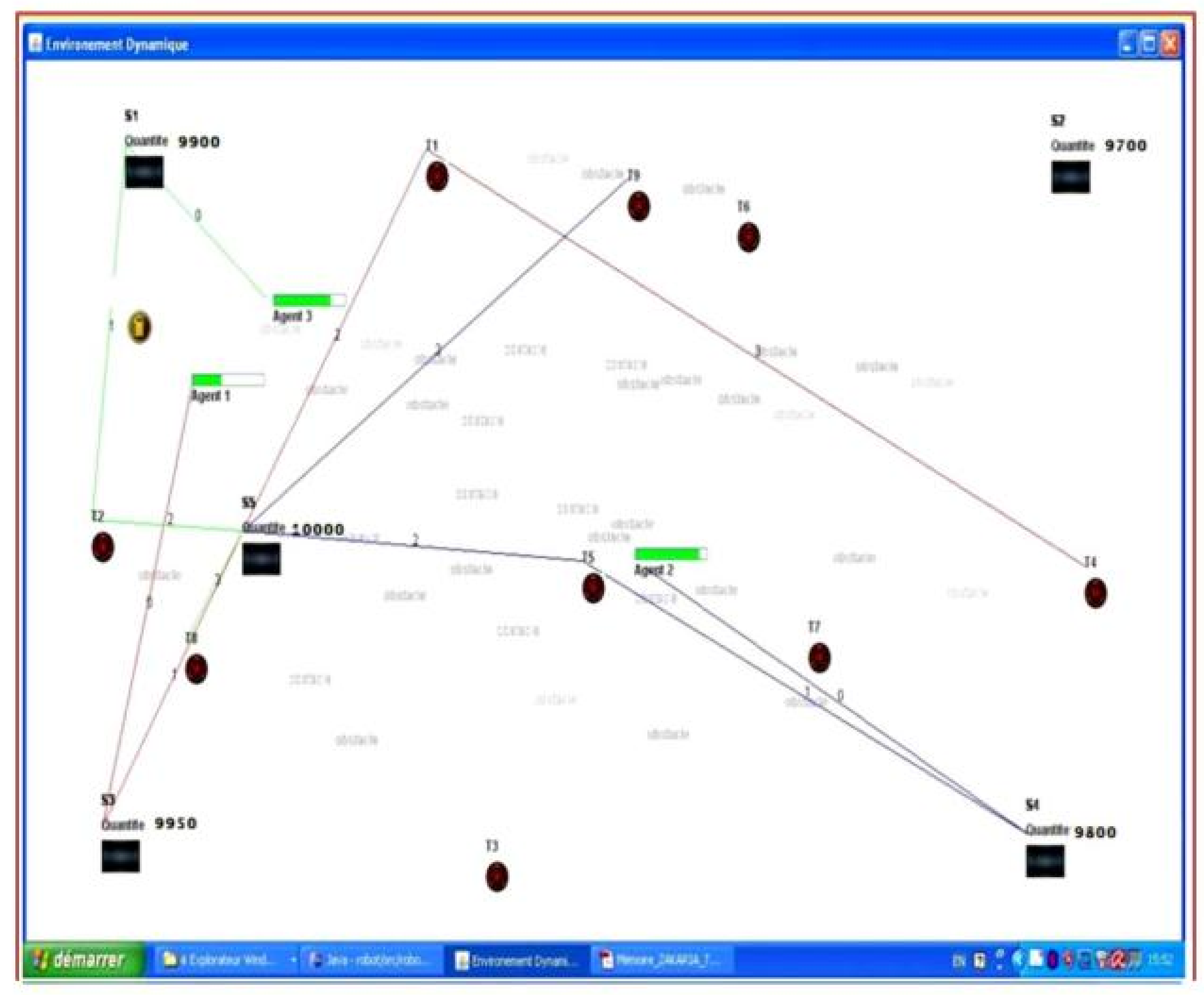
[illegible]

P_{1t} = (Move S3,false)(TakeS3,Article 3,50,false) (Move S5,false) (TakeS5,Article 5,400,false) (MoveT1,false)(DelevryT1,Article5,400,false) (Move T4,false)(DelevryT4,Article 3,50,false
F_C1 =7.323401357583406E-4 F_C2 =0.01 F_A =6.381241907869489E-5

P_{2t} = (Move S4,false)(TakeS4,Article 4,50,false) (Move T5,false) (DelevryT5,Article4,50,false)(Move S5,false)(TakeS5,Article 5,100,false) (Move T9,false) (DelevryT9,Article5,100,false)
F_C1 =4.165105495296216E-4 F_C2 =0.00961025641025641 F_A = 2.8483634339865544E-5

P_{3t} = (Move T1,false)(DelevryT1,Article 4,200,false) (Move S1,false) (TakeS1,Article 1,150,false) (Move T2,false)(DelevryT2,Article 1,150,false) (Move S5,false)(TakeS5,Article 5,100,false) (MoveT8,false)(DelevryT8,Article5,100,false)
F_C1 =8.092723350575081E-4 F_C2 =0.020833333333333332 F_A = 5.295344529228388E-5

5. Representation of the repaired plans



6. CONCLUSIONS

[illegible]

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