

# A Monitoring Subscription Language in the Framework of Distributed System

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The Grid technology is attracting a lot of interest, involving hundreds of researchers and software engineers around the world. The characteristics of Grid demand the developing of suitable monitoring system able to obtain the significant information in order to make management decision and control system behaviour. In this paper we are going to analyse a formal declarative interpreted language for the description of monitoring events. An user expresses his interest in verifying of certain events, for example he is interested in the occurring of subsequent composite events :  $e1:=$  'workload for ten minutes  $> K$ ', after  $e2:=$ 'number of active Machine $<y$ ', so he subscribes the event  $e:= e1$  after  $e2$ . This language, inspired to Generalised Event Monitoring Language (GEM)[1], allows high level subscriptions to be specified as composition of atomic subscriptions and integrates the concept of real time. The language allows to express many temporal constraint, which would have been very difficult to specify in a distributed systems. The goal of our research project consist of the tree steps: 1) the description of subscriptions though the use of a formal language; 2) the translating of the problem in a XML frame, using XML metalanguage tools; 3) the integration of this new language, made 'ad-hoc', in a monitoring services.

[1] A Generalised Event Monitoring Language for Distributed Systems, Masoud Mansouri-Samani, Morris Sloman, IEE/IOP/BCS Distributed Systems Engineering Journal, Vol. 4, No 2 June.

**Primary author:** Dr PALMIERO, Rosa (INFN and University of Naples)

**Co-authors:** Mr TORTONE, Gennaro (INFN of Naples); Dr DE BORTOLI, Natascia (INFN of Naples)

**Presenter:** Dr PALMIERO, Rosa (INFN and University of Naples)

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