

## **Grid in Finance & Atos Origin**

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Usage of grid architectures and high performance instruments: a valid support in improving and reinforcing Atos Origin services on payment systems.

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## 1. Introduction

For years Atos Origin provides its customers with services on payment systems, including fraud prevention.

Such services include elaboration of carried out transactions, pre-analysis of alerts, second level analysis by the Fraud Prevention team, and notifying customers and authorities in case of fraud.

Atos Origin sees in usage of grid architectures and high performance instruments a valid support in improving and reinforcing its services.

## 2. As to apply the grid technology to the payment systems

We found the following points to elaborate:

- 1. Algorithms of fraud identification
  Objective is to study solutions for realization and optimisation of anti-fraud rules using data mining methodologies and -instruments in high performance environments;
- 2. Data integration from heterogeneous systems using non-homogeneous procedures Various parties are involved in payment systems management, often using heterogeneous applications, architectures and data bases. Objective is to use and experiment with Grid technology to handle data in a uniform and inter-operational way, with particular attention to data regarding fraud prevention with payment cards.
- 3. Grid technology usage to optimise computing resources To provide services to its customers, Atos Origin uses various data centres hosting applications of different nature, each with its own characteristics and above all with usage peaks in terms of resource allocation. In that scenario without any doubts grid computing could have a significant added value.
- 4. Security

In the finance application area in general, and in payment systems in particular, there is obviously a continuous attention towards security topics.

The challenge is to allow secure sharing of computing resources, data and applications between different institutions while maintaining autonomy from an organizational, managerial and administrative view point of each organization.

This also requires knowledge on how to have the various entities – key players in the complex management of a payment system – participating, creating a virtual grid of intentions and collaboration.