



## SECURITY FOR VITAL EQUIPMENT AND TRANSPORTATION SYSTEMS

Created on January 1, 1949, the RATP<sup>1</sup> is a government agency dedicated to providing public transportation. The RATP employs 44,860 people to maintain and operate its equipment. This network comprises a full range of transportation modes including buses, metros, RERs<sup>2</sup> and Tramways. Ten million passengers use the RATP's transportation network every day.



### With Christian Borne

Manager, IT Security, RATP  
Information Systems, Transport and  
Systems Equipment Department

#### OBJECTIVE TO OPEN UP AND PROTECT SENSITIVE INTERNAL INFORMATION SYSTEMS

The RATP information systems department manages and controls the security for the internal information systems that host the heart of their activity. This includes the management and supervision of metro and RER lines as well as the energy used to run all of the equipment belonging to the RATP. *"In the past, these systems did not need to communicate externally. Today, however, these systems must provide information to both internal customers and external customers,"* said Christian Borne.

In brief, the systems had to be "opened up" while ensuring the highest level of security possible. Requirements for high availability and for volumetric information flow-processing were set. The need to gain command of the partitioning systems was also a decisive factor in choosing the proper solution. In case of a major incident, the engineers had to access the system core in order to restore the production configuration, and do this without going through sophisticated administration interfaces.

*"The main advantage for us, besides the stability of the system, is the fact that the technology runs on UNIX,"* said Christian Borne. *"This advantage is linked to our UNIX culture here. We are comfortable working on this type of appliance. The previous platform also ran on UNIX, but it did not provide the centralized administration and log-reporting features that NETASQ's solutions do."*

The systems also had to be incorporated into a pre-established security management process. It was imperative that these processes (correlation of logs, alert reporting, etc.) need not be modified to integrate the appliances.

*"Today we have about 20 NETASQ appliances ranging from the F50 to the F1000,"* stated Borne. *"The F1000 is a very robust solution integrating high upgrade capacity and high availability. These appliances are installed at the central site supporting a large number of users who require instant availability. High availability is required even when metro, RER and Tramway traffic stops, and our customers are no longer using our network."*

<sup>1</sup> Régie Autonome des Transports Parisiens.

<sup>2</sup> Réseau Express Régional.



*Opening a closed network and information system requires taking precautions, particularly with regard to partitioning. At the same time, the solution we chose had to meet our technical requirements. Also, it had to pass our tests in order to verify that the solution met our expectations. NETASQ's appliances passed our tests."*

**Christian Borne**



**THE SOLUTION WAS TO MIGRATE TO NETASQ SYSTEMS**

“We prepared well and built a migration plan. When it came to replacing obsolete equipment, the operation, which was quite simple, required first retrieving all of the existing configurations, then porting them to the new protection equipment,” said Mr. Borne. The migration took place during the night while the transportation network was idle. Indeed, even when all the trains are parked and customers are at home, the RATP agents carry out system maintenance activities ensuring that the RER lines and the 16 metro lines work properly. The migration went smoothly and without any noteworthy technical problems.

All of the sites were migrated gradually and they were handled with the same recommendations and rules as the other sites. All protection systems are now administered with the tools provided by NETASQ. Mr. Borne noted that the RATP has been using NETASQ’s solutions for about four years.

**THE CHOICE OF NETASQ OVER OTHER CONTENDERS WAS MADE AFTER EXTENSIVE MARKET STUDY AND TESTING**

“As far as firewalls are concerned everyone has their own method to select a product,” Borne added. “We wanted to make a technical choice and not a choice influenced solely by market trends. This choice took into account the particularity of our systems and the information flows on our partitioned systems.”

“There are about 3000 customers (users or system) accessing the information filtered by NETASQ’s appliances. The information systems function 24/7.”

**Christian Borne**

Relying on a market study and its own requirements, the RATP initially identified some solutions that looked to be satisfactory. The next step was to carry out its own benchmark tests

with the various providers. At times, the tests went well; but often there were abnormal operations or the solutions did not meet the requirements of RATP. At the conclusion of these exhaustive tests, NETASQ solutions were chosen as being the very best for the application.



**CLIENT BENEFITS**

- System stability, running on UNIX
- Centralized firewall administration and reporting
- Easy transition from previous partitioning systems
- One disk failure in 4 years with no system interruption.



**ABOUT NETASQ**

NETASQ was established in 1998 and is the leading European vendor of unified security solutions for businesses of all sizes: SMEs-SMIs, large enterprises and government bodies. The company designs and markets Unified Threat Management (UTM) appliances based on its own ASQ (Active Security Qualification), a unique real-time intrusion prevention technology, with network and application firewall features, IPSec and SSL VPN, content filtering, anti-virus, anti-spam, anti-spyware, and secure VoIP. Living up to its reputation as a technological innovator, NETASQ thus provides all the essential security functions, built into a single appliance. Its ASQ technology is embedded by default in all products, guaranteeing clients optimum protection through the combination of several innovative analyses. ASQ tangibly delivers on the promise of zero-day protection security.