

# SolarWinds on track as Ansaldo STS builds Rome Metro

When tourists and citizens are avoiding congestion by travelling swiftly and safely on Rome Metro's new automated Line C, they will owe just a little to SolarWinds network management. Two of these, Network Performance Monitor (NPM) and Engineer's Toolset, are helping **Ansaldo STS**, an industry leader in signalling and rail transportation solutions, to create an ultra-reliable network that will run the city's 30 driverless trains.

## The Customer

Ansaldo STS provides traffic management, planning, train control and signalling systems and services globally for railway and mass transit transportation systems. Group companies provide traffic management, train control, signalling systems and maintenance services, all aimed at achieving lasting efficiency and safety for clients and end users. Based in Genoa, Italy, Ansaldo STS employs over 4,100 people in 28 countries.

Rome's fully automated Line C, due for completion in 2016, will fill a huge gap in the city's metro system that is not covered by the existing A and B lines. Construction is being hampered by antiquities that are omnipresent in the historic centre of Rome. The new route will be 25.5 km (15.8 miles) long and have 30 stations. Some 17.6 km (10.9 miles) will be underground. When completed, the line will be served by 30 AnsaldoBreda Driverless Metro trains.

## IT Management Challenge

Creating a computer system that automates the 24/7 operations of a €75 million railway system represents a huge and complex challenge. For the first section, Ansaldo has set up signal equipment rooms (SER) at eight stations, each with a redundant backbone gigabit switch residing on a fibre backbone, and each with its own sub-network. Eventually there will be 14 locations, forming a redundant fibre ring and linked by 14 switches. A completely separate 'B' network, running on a separate fibre network, is being set up to guarantee fail-safe operations. The first section of the Line C project is due for completion by December 2012. The entire rail system will be controlled by Ansaldo STS Mass Transit Dispatch Solution platform.

When the project began, a key objective was to monitor track-switching and control mechanisms, and to ensure that Rome Metro's operators have a comprehensive view and total control of traffic operations. Possessing redundant networks that are efficient and reliable was central to these aims, so Ansaldo engineers needed to ensure they had complete visibility into the networks, could spot any developing problems early and fix them easily.

## The Solution

James Fraasch, Senior Telecommunications Engineer with Ansaldo, had already used SolarWinds solutions for more than a decade, helping with projects that included work with the Port Authority Trans-Hudson Corporation which serves New York City, and SunRail in Florida. Now he is working on the Rome Metro project with 14 engineers from Ansaldo STS USA's Telecommunications Team.

He recalls, "Years ago, I had lots of problems with T1 circuits going up and down. Installing **SolarWinds Network Performance Monitor** allowed me to locate the sources of these issues and fix them easily. Now I always use SolarWinds NPM and **Engineer's Toolset**, which handle troubleshooting, testing and background work. Today we quote NPM to customers for monitoring all our projects."

## CLIENT STATISTICS

- 40 workstations
- 150 switches
- 2,500 active interfaces (switch ports and NICs)
- Ansaldo's Hermes platform for train control

"SolarWinds NPM gives us safer troubleshooting and allows us to see exactly what's on the network. In eliminating all the tedious manual work, it saves us hours every day. What's more, NPM shows us issues before they become real problems and also delivers a high degree of reliability."

