

CUSTOMER SUCCESS STORY:
METROPOLITAN FIRE
AND EMERGENCY
SERVICES BOARD

Metropolitan Fire and Emergency Services Board safeguards services for four million residents with CA SPECTRUM NFM.



Customer Profile

Industry: Public sector
Organization: Metropolitan Fire and
Emergency Services Board
Revenue: A\$300 million
Employees: 2,200

Business Impact Summary

Business:

Located in Melbourne, Australia, the Metropolitan Fire and Emergency Services Board (MFB) employs 1,600 firefighters who provide emergency response services from 47 fire stations and specialist departments.

Challenge:

Having reliable technology infrastructure is a high priority for the MFB as it must respond quickly to fires and other emergencies and ensure the safety of individuals and the community. The organization's IT staff has to make certain the network infrastructure used to support critical applications runs smoothly.

Solution:

The MFB turned to CA SPECTRUM® Network Fault Manager (NFM) to optimize network availability and remediate faults before they impact the organization's ability to provide responsive emergency services. The solution is used to manage the data network, an IP telephony system, and an environment consisting of various critical applications across 60 servers and up to 1,100 desktops PCs.

Result:

By simplifying the management of a complex environment and maximizing network availability, the MFB can ensure the systems used to dispatch fire and emergency crews and deliver information to firefighters are up and running. At least 80 percent of the MFB's network issues are resolved before they impact on the organization's 2,200 users and, more importantly, before they affect the emergency response process.



CA Customer Alliance Program



Transforming
IT Management

Business

Providing world-class protection services

The Metropolitan Fire and Emergency Services Board (MFB) provides protection from fire and other emergencies in Melbourne's metropolitan area. The organization is responsible for emergency response services inside the Metropolitan Fire District, which covers 1,096 square kilometers. Firefighters work closely with the community to promote safety and coordinate emergency prevention and preparedness activities.

At least 248 officers and firefighters are on duty at 47 fire stations at any given time to crew emergency vehicles and carry out essential duties. Firefighters also respond to medical emergencies such as heart attacks under the Emergency Medical Response — First Responder program.

Serving a population of around 4 million people, the MFB receives around 3,000 to 4,000 emergency calls a month and consistently reports some of the fastest emergency response times. The MFB also achieves the highest percentage of fire containment to room of origin among all other Australian fire services.

Challenge

Repair network issues fast

The MFB relies heavily on technology such as communications systems, GIS mapping tools and other computing resources to help fire crews respond to emergency situations. These systems and tools are used to collect and deliver information such as the type and location of the emergency, a map of the area and its risk profile, and any other data that may help firefighters develop a response to the incident.

Managing the availability of these systems and tools is a high priority and it is imperative that they are functioning normally all the time. This requires close monitoring of the underlying network components used to deliver services.

"Network availability is important; if the network doesn't work, our applications won't work," says David Aitken, Infrastructure Services Manager, Information and Communications Services, Metropolitan Fire and Emergency Services Board.

"It is particularly crucial in emergency services where teams need to move fast to respond to situations. Data is a key part of the MFB's response and planning processes and must be made available in a timely manner for it to be useful. If our IT systems are not working normally, they need to be fixed quickly."

Adding to the MFB's challenges was the fact that prior to 2000, the organization had no network management tools in place to oversee its core network. Users had to notify the helpdesk for most issues and problems were debugged manually. This situation made it difficult for the organization's IT staff to find the root cause of faults quickly, which placed the MFB at risk of not reacting quickly enough when emergency calls were received.

"Data is a key part of the MFB's response and planning processes and must be made available in a timely manner for it to be useful."

David Aitken
Infrastructure Services Manager,
Information and Communications
Services, Metropolitan Fire and
Emergency Services Board

“We have the ability to display the information on multiple screens where we can look at different components simultaneously.”

Lester McClure
Senior Network Engineer, Metropolitan
Fire and Emergency Services Board

Solution

Meeting the need for responsive emergency services

As an emergency services provider, the MFB cannot risk any system outages or miscommunication. A single missed call, a minor malfunction or even a few minutes delay in the delivery of information could result in the loss of life or property. By implementing a network management system, the MFB can maximize the availability of its network and access to the applications that run on it.

In 2000, the organization implemented CA SPECTRUM® Network Fault Manager (NFM) to automate the network management process, and leverage event correlation, root cause and impact analysis technology that pinpoints the exact cause of a network problem. In February 2008, the MFB upgraded the solution to manage a more complex Cisco-based IP telephony and data network, and an environment that consists of Oracle databases, SAP financials, human resources and plant maintenance applications, and around 900 desktops.

“We have continued to stay with CA SPECTRUM NFM because the product continues to meet our needs, it’s advanced in areas that we believed it needed to be and it’s stayed reasonably affordable,” says Lester McClure, Senior Network Engineer at Metropolitan Fire and Emergency Services Board.

“CA SPECTRUM NFM also has a better ‘understanding’ of the Cisco IP telephony environment and the network devices we installed,” says Aitken. “This makes it easier for us to monitor incidents and uncover the root cause of issues, so we can make sure the services emergency crews rely on are performing at their best.”

Simplifying the management of a more complex IT environment

The MFB runs a relatively complex ‘mesh’ network that would be extremely difficult to manage manually. By using CA SPECTRUM NFM, the organization has automated detection and notification processes, making it easier for IT staff to monitor the performance of the network and not just faults reported by users.

The CA SPECTRUM NFM Report Gateway is used to collect data and produce reports. Data is presented to the user via the CA SPECTRUM NFM OneClick graphical user interface. “The OneClick interface is extremely valuable to us because it allows us to provide our help desk and remote staff with access to network management functionality,” says Aitken. McClure adds that the OneClick interface “was compelling enough for us to continue using the product at a time when we might have been considering other solutions.”

CA SPECTRUM NFM also enables the MFB to detect network performance issues that may not necessarily have an immediate impact on users, but might affect them if left unattended. “For example, we recently had power works and had to reboot our servers,” says Aitken. “In this situation, we used CA SPECTRUM NFM as a system assurance tool; it tells us whether or not everything is indeed running normally.”

24x7 monitoring ensures high availability

CA partner Green Hat Consulting managed the project and customized CA SPECTRUM NFM. “We understood MFB’s need to monitor their critical network and applications,” said Tyson Blacker, Senior Consultant, Green Hat Consulting. “As a specialist CA SPECTRUM NFM

integrator, we designed a solution that provided a sound foundation to optimize their investment. From this base, CA SPECTRUM NFM is now a core solution managing MFB's increasing IT assets. We continue to work closely with MFB to identify ongoing improvements and upgrades to the implementation."

"We are looking at more events these days, but they are being resolved faster and with much less impact on end users."

David Aitken

Infrastructure Services Manager,
Information and Communications
Services, Metropolitan Fire and
Emergency Services Board

CA SPECTRUM NFM provides the MFB with tools to better manage its custom devices. Some of these devices are related to mission-critical tasks such as the activation of alarm bells at stations and the printing of dispatch notes. For example, CA SPECTRUM NFM can detect if a printer is running out of paper and send an alert to tell someone to refill the printer. This ensures dispatch notes containing critical information can reliably be automatically printed when emergency situations arise.

Green Hat also integrated CA SPECTRUM NFM with the MFB's Attention Software SMS and voice notification application. When a network problem is detected, the Attention Software application automatically sends a text message to alert IT staff. These notifications can be escalated if the initial contact does not respond within a set timeframe. "The IT team is on call 24x7, so there will always be someone responding to an incident and ensuring problems are fixed and no interruptions are experienced," says Aitken.

Results

Protecting the community at all times

By gaining the ability to monitor its network around the clock and enabling automatic fault resolution in certain cases, the MFB has improved the availability and performance of systems used to dispatch fire and emergency crews.

The organization can:

- Resolve the vast majority of network events before they impact the MFB's ability to deliver critical data to emergency crews
- Resolve at least 80 percent of network faults before they impact on MFB system users and IT&T services
- Repair network faults automatically without user intervention, enabling staff to concentrate on high value activities instead of routine maintenance
- Determine the root cause of faults so they can be fixed quickly and staff do not waste time chasing false leads.

Proactive fault resolution ensures critical systems are highly available, enabling the MFB to fulfill its main function of responding quickly and efficiently to fires and medical emergencies where lives and property are at stake. "If something is working correctly, we know and although we can't guarantee 100 percent availability, we can be confident that our network is performing at its best," says Aitken.

In addition, on average three faults every week are resolved automatically and not by IT staff members, so they can focus on proactive network management that further improves application availability and performance. "We are actually looking at more events these days, but they are being resolved faster and with much less impact," says Aitken.



About Green Hat Consulting

Green Hat Consulting is a niche professional services firm that provides software engineering services to optimize the use of network management and monitoring systems within information systems networks. The company serves customers with complex requirements and high availability needs, such as top-level enterprises and public sector organizations. Green Hat Consulting takes a top-down approach by understanding business and technology strategies and designing systems implementations to support those strategies. Its services include design and implementation services, project management and solution development, and organizational training.

To learn more and see how CA software solutions enable other organizations to unify and simplify IT management for better business results, visit ca.com/success.