

Melbourne Airport's Network Infrastructure -Under Control with Cormant-CS (formerly Cablesolve)

A Case Study



OVERVIEW

Melbourne Airport

Melbourne Airport is the second largest airport in Australia, handling 19 million passengers and 165,000 flights per year. Melbourne Airport aims to be the leading airport company in the Asia Pacific Region while realizing the airport's potential in providing safe, secure and efficient services, providing quality customer service and taking advantage of opportunities for growth and development. Melbourne Airport has won numerous passenger and industry awards and has been ranked as one of the world's top 5 airports by IATA. Passengers in Business Traveller Magazine have voted it five times as one of the top 10 airports in the world.

- ➔ around 450 flights and over 50,000 passengers using the airport everyday
- ➔ over 10,000 airport workers working for many different companies
- ➔ over 150 on-site businesses

Melbourne Airport

Type of Business:

- ➔ Airline /Building Management

Number of Employees:

- ➔ Over 10,000 airport workers

IT Scope:

- ➔ 40-50 servers
- ➔ Over 15,000 managed ports

Product Used:

- ➔ Cormant-CS - Connectivity and Infrastructure Management Software

Top Issues:

- ➔ The airport is a relatively complex site with around 180 buildings
- ➔ The cabling and network records are not up-to-date
- ➔ Moves, Adds and Changes (MAC) take 2.5 days to complete
- ➔ The need to avoid downtime which could affect airport operations

Realized Benefits:

- ➔ Completely accurate and available documentation, including data & electrical connectivity
- ➔ Decreased the time taken to perform a MAC by up to 60%
- ➔ Faster problem identification and resolution
- ➔ Improved productivity and service levels from IT staff and contractors
- ➔ Optimized utilization of hardware & software assets
- ➔ Significantly reduced likelihood of downtime

Melbourne Airport's IT and Infrastructure Challenges

Melbourne Airport is a relatively complex site with around 180 buildings. The data cabling system has to support the entire airport operation infrastructure as well as that of other airlines and businesses.

Network services used by the airport include the traditional voice and data services as well as video and data for flight information, display panels and security related systems.



Melbourne Airport is in the process of upgrading the cabling infrastructure to Category 6 pair manageable copper cabling and new fiber optic and modular patching.

Connectivity and Infrastructure Management

Until the implementation of Cormant-CS, the IT group managed the cabling system using paper records with HP Open View supplementing the paper records by monitoring the logical network. With HP Open View, the IT group only saw what equipment was connected to each switch port. However, it provided no information about the physical layer, the details of the equipment nor cabling paths or locations.

The lack of detailed records meant it was quite common to spend days trying to trace cable paths for data and electrical circuits before performing a Move, Add or Change (MAC).

According to Mark Funston, the Systems Manager for Melbourne Airport, a MAC could take up to two and a half days to complete. As expected, the paper records proved almost impossible to keep up-to-date.

What Melbourne Airport Needed

For an airport, avoiding downtime is critical. A single flight monitor that is out of action can delay passengers getting to a flight gate, potentially costing the airlines and airport thousands of dollars because of delays. Downtime can mean flight delays and passenger dissatisfaction due to its effect on IT and flight information systems.

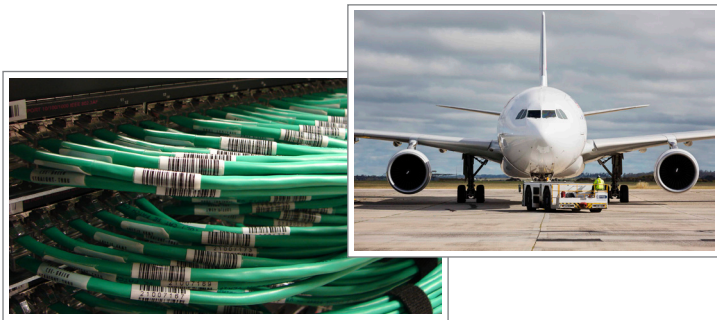
Mark also needed to improve:

- ➔ **The connectivity and infrastructure records and information; moving them from people's heads into a system and ensuring that the records are always up-to-date.**
- ➔ **The visibility of equipment, its location and utilization, in short - IT asset management.**
- ➔ **The ability to plan work on the infrastructure before starting.**
- ➔ **The cost and time it was taking to rectify incorrect cable patching.**

After deciding to upgrade portions of their structured cabling system, Melbourne Airport wanted an infrastructure management system that could manage the diverse equipment and physical network.

Melbourne Airport was looking for a solution that would manage everything they had including their telephone and data networks and all the kinds of cabling installed at the airport including optical, copper, coaxial, even security and power connections. The size of the airport required a management system that would give them mobility and portability of all the records as well as the capability to do regular audits to check for discrepancies in their network connectivity. Any chosen system would have to be able to scale to support all 180 buildings that are part of the airport cabling system.

More importantly, the system chosen needed to be able to bring together all required information into a centralized database to provide access to other relevant internal departments.



Cormant-CS -The Chosen Solution

Like many large cabling installations, the infrastructure is spread over a very large area, making the **portability** of Cormant-CS an important feature. Portability provides network engineers full off-line access to all the connectivity and infrastructure records no matter where they are. This includes floor plans of the buildings which makes locating equipment simple.

Melbourne Airport wanted a system that will be able to show them what equipment is connected to what and via what channel. Cormant-CS was able to address that need because it fully supports **end-to-end management** of the entire connectivity channel.



Cormant-CS has the ability to show the various links and end-points regardless of the number of buildings, equipment or cables. The use of integrated network detection and its capability to use SNMP means Cormant-CS can automatically identify devices connected to the network and alert the network staff if they move.

The use of barcodes and a Pocket PC with total off-line access and a barcode scanning engine made record keeping quick and painless.

One side benefit to Mark has been the documentation of all the electrical connections in the main airport building. With Cormant-CS, Marknow has access to full data and electrical connectivity information for all equipment.

Regarding Cormant-CS:

"Not having the information and knowledge on a piece of paper or in somebody's head which may eventually disappear. Now you have information in the Cormant-CS System and it's there when you need it."

**- Mark Funston
Airport Systems Manager**

Benefits Realized by Melbourne Airport

The IT group of Melbourne Airport has assurance that their records are accurate, dependable and readily available. Unlike before, there is no more need to run around looking for things. There is a noted improvement in the productivity and the service levels of the IT staff. Assets are utilized better; finding assets that are lost or unaccounted for, like unused data and voice ports and equipment, is much easier. The IT staff knows that if down time does occur they are able to determine the cause of the failure quickly and can begin solving the problem fast with Cormant-CS.

When asked what key benefit was derived from Cormant-CS:

"Ease of use and having the data with us, being able to have it on the Pocket PC is really good. It is portable. You can go down there, you can do the changes and put the changes straight into the system, rather than having somebody write it down on a piece of paper, take it away and take it back up to the office and perhaps lose it or forget to enter the information in the system."

**- Mark Funston
Airport Systems Manager**

With Cormant-CS, the IT group has been able to move from an inaccurate paper based system, to an up-to-the-second accurate database system with records available whenever and wherever required, even when off site.



The Future

With Cormant-CS managing Melbourne Airport's connectivity and infrastructure, the airport is looking towards the use of Cormant-CS in additional buildings and areas.

Melbourne Airport assures its customers and employees of uninterrupted 24-hour operation, enabling people and freight to arrive just in time, anywhere in the world.

Cormant ensures its users that it will continue to innovate Cormant-CS with product upgrades that are based on customer needs and exceed customer expectations while complying with the latest performance standards.

Looking forward, the Cormant-CS System will become even more efficient and useful, promising to make IT infrastructure and connectivity management an easy task.