



Answering the Wireless Call of the Mall : UOL Rings in a new era in retail management with wireless solutions from Motorola



"UOL is committed to providing the highest standards of excellence to our valued retail occupants. Motorola's retail management solutions enable us to achieve that by ensuring that our tenants' confidential business data is in safe hands. The simple, easy to use solution enables them to translate valuable insights into action without the fear of security breaches." - Foo Say Twang, Group IT Manager, UOL Group Limited

Company Overview

UOL Group Limited (UOL) is one of the most forward-looking real estate conglomerates in Asia-Pacific, with an impressive portfolio of investment and development properties in the region. Founded in 1963, UOL Group is the recipient of many prestigious awards, and manages a diversified portfolio comprising residential apartments, offices, retail malls, hotels and serviced apartments.

United Square is one of UOL's premium properties in Singapore. A destination mall for families, United Square is positioned as a "Kids Learning Mall" and has some internationally well-known brands occupying its 200,000 sq.ft. of retail space.

In order to maximize value and return for its premium tenants and investors, UOL wanted to implement a state-of-the-art retail management infrastructure that helped them derive real insights for effective mall management. These included monitoring customer purchase behaviors and traffic at a particular store so that retail value and marketing could be appropriately directed, translating in real-business benefits for its tenants.

UOL's predominantly manual system at United Square was unable to adequately cope with the demands of the growing business and pressures for effective and secure data provisioning.

Hence, UOL turned to Motorola to improve their retail management infrastructure.



Customer Profile



UOL Group Limited

Company

UOL Group Limited

Location

Singapore

Industry

Retail

Products

Motorola WS5100 Wireless Switch, AP300 Dual Radio access ports and CB3000 client bridges

Partner

Sigma.3 Pte Ltd

Application(s)

Motorola EMB wireless infrastructure has made UOL business more efficient and more profitable for their tenants. UOL is now able to capture sales information and analyze customer traffic and profitability at multiple levels for all the tenants, allowing the premium outlets to maximize their occupancy at the mall.

Benefits

1. Enhanced visibility into sales performance
2. Improved central management
3. Heightened security through identification of traffic source
4. Better customer experience

The Challenge : Providing a secure network for tenants to share data and gather customer insights

Being a popular destination for families in Singapore, United Square was witnessing a rise in visitors. Sales were encouraging and premium tenants at United Square were looking at UOL to manage retail resources to attract customers into their stores.

In order to effectively manage and further optimize value for its premium tenants, it was crucial for UOL to have a clear view of the retail volume that was being generated. The requirement of this data was essential to determine the retail value of different locations within the shopping mall, a key element to effectively plan its trade mix and promotional strategies. The insights were also used to ensure that customers enjoyed a multi-sensory experience that would appeal to them through visuals, sound and scent, incentivising customers to increase their purchases whilst at the mall. Through strategically placed advertisements and banners, the calming effects of soothing music as well as the scent of freshly baked pastries and delicacies, customers were enticed to make more purchases when they were at the mall, hence increasing sales and profits for the tenants.

After an extensive assessment of the issues and challenges at United Square, the Motorola Enterprise Mobility team identified several pain-points that could be fixed through the implementation of a proper retail management solution.

The manual system that was previously implemented to collate the data was found to be extremely ineffective as the process was highly resource and time intensive. The point-of-sales (POS) systems used by nearly all the shopping mall tenants also did not have any wireless capabilities, which created a major hurdle for the management team, who did not want to install additional wireless adapters that could disrupt the current configuration.

Another challenge was to protect the network from attacks and security threats. As such, the management also needed a system to ensure that the data could not be viewed by unauthorized personnel. A wired system to block illegal viewing was not viable as location requirements could change frequently due to renovations or rearrangements to the floor layout, affecting individual tenants. The exceptionally high costs of rewiring further rendered it to be impractical.

“The system largely contributed to many of the operational efficiencies that have made the business more efficient and therefore, more profitable overall for our tenants. Previously, the stores were operating in their own silos with a lack of consistent business monitoring and poor data sharing. Now, with Motorola, we capture sales information and analyze customer traffic and profitability at multiple levels for all the tenants, improving our overall management of the mall,” cited Mr. Foo Say Twang, Group IT Manager, UOL Group Limited.

The Solution : A reliable and secure wireless infrastructure using Motorola switches and access points

United Square required a solution that had wireless security features to effectively address the security concerns raised by the tenants. In addition, the solution implemented needed to have the least amount of configuration changes required to a tenant's POS system to avoid disrupting prevailing systems.

After a careful review of retail management solutions available, United Square picked Motorola wireless products to address the situation. Merging various generations of technology to effectively solve the issues at United Square, the resulting system consisted of a main WS5100 WLAN switch, 46 AP300 Dual Radio access ports and 180 CB3000 client bridges for each of the 120 tenants at United Square.

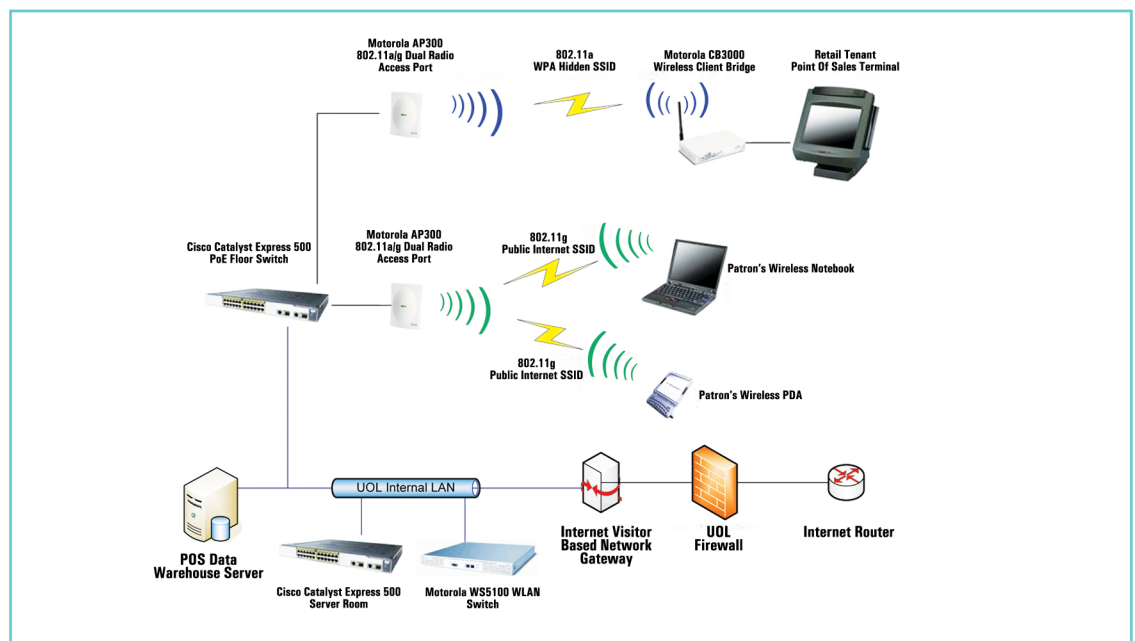
Designed to enhance support for enterprise mobility in large retail organizations, the WS5100 Wireless Switch incorporates a wireless solution that integrates safety features such as intrusion detection and secure guest access to protect the network from threats or impositions. The product's ability to create multiple wireless SSIDs by assigning unique VLAN tags also ensured that United Square was able to separate internal traffic from public internet traffic that was being generated at the shopping centre's premises.

The AP300 Wireless Access Ports was perfect for United Square as its rapid configuration substantially reduced the cost of deploying, implementing and managing United Square's wireless LAN, while significantly increasing features and security of its LAN infrastructure. The AP300 Wireless Access Ports also simplified and reduced total cost of installation through the support of standards-based Power-over-Ethernet (PoE).

The CB3000 extended secure wireless connectivity to multiple devices that would help provide the information required. With advanced security capabilities to prevent security breaches, cost-effective wireless connectivity was extended to tenants at the mall. It also increased convenience for tenants who wished to improve their floor plan as they could easily relocate the devices to maintain wireless connectivity, without incurring additional expenses and time of re-wiring.

Motorola's integration partner, Sigma.3 Pte. Ltd., integrated its Visitor Based Network gateway service allowing the shopping mall's patrons and tenants to access the Internet wirelessly. A dedicated SSID with a dedicated VLAN was added to separate the POS network from the public internet network. The solution extends and leverages the capabilities of existing wireless network by allowing visitors and patrons to access the Internet easily without additional investment.

According to Mr. Foo Say Twang, Group IT Manager, UOL Group Limited, "The solution was indeed the perfect fit for United Square. Not only did we ensure that our tenants were happy with the increased security that the solution provided, but it also gave us real-time insights and data into the performance of the retailers. On top of that, the mall management and our retailers could also use the information to plan effective and targeted consumer programmes that would positively impact our sales and profits."



The Benefits : A Secure Network to Protect Confidentiality and Obtain Real-time Data

The use of Motorola's enterprise mobility solutions significantly helped the management of United Square keep track of the mall's sales activity. The management was able to obtain real-time data that was highly accurate and detailed over a secure and safe network with time savings of 5% to 20% for both tenants and UOL. There was also zero downtime for tenants and shoppers who were able to surf the internet in a secured environment.

Taking only one month for end-to-end implementation and 15-minutes to connect each tenant to the system, the solution provided United Square with the following benefits which significantly improved processes at the shopping centre:

1) Enhanced visibility into the transactional performance of each tenant at the shopping centre. The data collected from all the shop tenants enabled the mall management to appropriately negotiate rental fees based on the sales and the retailers' location in the shopping mall.

2) Improved central management. As the status of the access ports (active and adopted) were visible from one controller, this ensured that the management did not have to poll individual access ports periodically for their status. All wireless channels and AP power configuration were also managed automatically, saving the company time in eliminating the need to perform a more intensive wireless site survey. This also addressed the management's concern about wireless interference from neighboring wireless access points.

3) Heightened security through the identification of traffic source.

The Motorola Enterprise Mobility business solution has the strongest wireless security feature to address the concerns of the most skeptical tenant. Apart from ensuring that the network is secure and safe, the WS5100 also has the ability to create multiple wireless SSIDs and assign them to unique tags which allowed the management to securely separate the POS traffic from public internet traffic.



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