World Class Entertainment with World Class Communications

BACKGROUND

Marina Bay Sands (MBS) is South East Asia's most prestigious integrated resort, including a hotel with three 55-storey towers with 2,561 luxury rooms and suites. The Sands SkyPark, an awe-inspiring engineering feat, offers 360-degree views of Singapore's skyline from 200m in the sky and covers the three towers. It is home to fine-dining restaurants, lush gardens, an infinity edged swimming pool and the world's largest public cantilever housing an observation deck.

A Highly Sophisticated Communications Solution

As the latest Integrated Resort in Singapore attracting visitors from all over the world, MBS was clear that it needed a highly sophisticated communications solution to support the complexity and scale of its property's operations, which span across the hotel, meetings and conventions, casino, entertainment and shopping complex.

The desired communications network has to be absolutely reliable, available 24 x 7, highly secure for VIP guests, and communications-critical to facilitate its daily operations and respond to emergencies when it calls for it. It should also allow seamless integration with external IP and GSM networks and software applications to cater to the specific needs of the hotel's frontline and backend casino operations.

THE CHALLENGE

Following careful assessments of MBS' requirements, Motorola and FCS proposed a compelling, scalable solution that truly represents the next generation in communications and guest service architecture. The technology project team at MBS decided on Motorola's TETRA (TErrestrial Trunked RAdio) platform after considering several proposals and technology platforms. Motorola's Scalable Dimetra™ IP TETRA solution was picked for its proven reliability, high performance and robustness. The successful cases in several gaming establishments in Macau and Australia also added MBS' confidence in Motorola to meet their complex communications needs.

CUSTOMER PROFILE

Company
Marina Bay Sands

Technology Partner
FCS Computer Systems

Industry
Hospitality

Motorola Products
Scalable Dimetra™ IP Solution Suite

"For over seven decades, Motorola has been the trusted partners of government agencies, large international event organizers and infrastructure operators. Our partnership with the Shanghai World Expo 2010 is the latest proof point of our ability to design solutions for large scale complex operations; with six TETRA systems and more than 50,000 subscriber radios supplied to this global expo", said Phey Teck Moh, corporate vice president, Motorola Enterprise Mobility Solutions, Asia Pacific.

THE SOLUTION

Building a Strong Foundation with TETRA

The deployment of the Scalable Dimetra IP system at MBS is distinctive in its scale. The network was designed to deliver a seamless and reliable mission-critical communication solution across six million square feet of built up and open spaces on the property. The system was also able to integrate with the hotel's PABX and IP systems.

Motorola's application partner, FCS Computer Systems, provided e-Connect - a guest service request application solution. E-Connect leverages business intelligence to assign jobs based on staff skill sets, shift times, designated areas, and job loads and enables hoteliers to implement a one-touch, hassle-free service request facility for all guests.

Tony Lee, CEO of FCS Computer Systems, said, "The e-Connect solution will enable Marina Bay Sands to offer optimal guests' service delivery and minimize costs, increase productivity and operational efficiency."

Laying the foundation for e-Connect is Motorola's Scalable Dimetra IP switch. This highly flexible scalable solution is able to integrate voice, messages, mobile applications and image transmission on a single network. This includes integration with Motorola 3G mobile solutions via IP telephony to enable communications within the integrated resort and with external parties.

The system also enables remote software configuration downloads, doing away with the need for costly on-site migration and maintenance, also extending full control by the user. Multiple user segments can use this communication system across different operations on the property.

"Marina Bay Sands is a unique opportunity for technology vendors to showcase their solutions. The scale and complexity of the project was a daunting task, and Motorola and FCS had to deliver a world class communications platform. They have risen to the challenge well, delivering a robust, full featured end-to-end solution within the slated timeline," said another MBS spokesperson.

With the integrated system, a guest can send a request via IP-enabled phones in the rooms to guest services and be promptly addressed by the right personnel. His call can also be transferred across TETRA mobile radio devices or GSM mobile phones. An MBS staff can even create talkgroups for collaborative discussions. The high level of interoperability allows for seamless operations and quality service, resulting in increased operational efficiency and customer satisfaction.

BENEFITS

Peace of Mind for VIPs

MBS routinely hosts numerous VIPs and dignitaries at its world-class entertainment and business conventions. VVIPs require a high level of confidentiality in terms of their whereabouts and schedule. This meant that a full suite of security features and covert voice communications with encryption and data applications had to be included into the configuration. The system was enhanced with private system privileges to ensure that only the appropriate personnel had access to sensitive and critical information.

Overcoming Hurdles

As the project was executed alongside the construction of MBS, factors such as unscheduled power outages often disrupted the process. The team worked around the issue with regular data backups to minimize any impact on the progress of installing and testing the communications system.

Another challenge was integration into various components of MBS' IT and telecommunications infrastructure. The project team took into consideration the multiple sub systems such as the PABX and IP networks, understanding the customer's IT infrastructure and requirements.

A project of this scale presented tight timelines for delivery and testing. Within a six month timeframe,

Motorola completed the deployment of the system ahead of deadline – a soft launch in April 2010 and grand opening to the public in June 2010.

Customer Satisfaction

MBS benefited from an improved communication process whereby staff had ready tools at their disposable to make operational decisions and better serve their guests.

The enhanced communications security measures allow for MBS to host high-level dignitaries, celebrities and VVIPs with high levels of privacy, safety and personal attention to detail.

In the long term, support for multiple data applications and a flexible and reliable system that can be changed on the fly. This enables MBS to dramatically reduce cost of ownership and scale their existing network's capabilities according to future requirements.

All of these features and enhancements contribute to MBS' ability to better serve their guests, and operate the various components of the Integrated Resort in a smooth and seamless manner.

The result – a world-class communications infrastructure and hospitality guest services for Singapore's iconic world-class entertainment and tourism landmark.

MOTOROLA