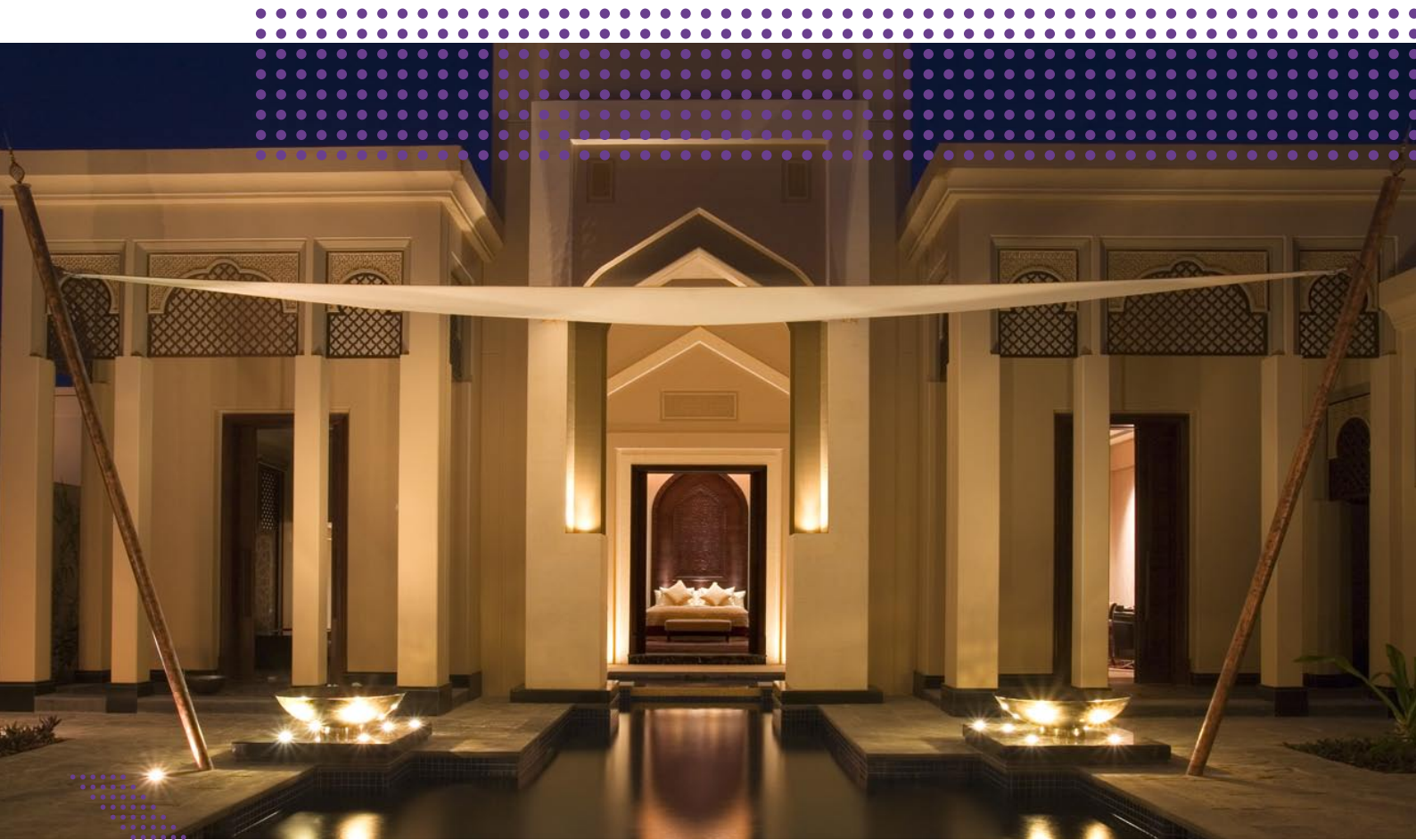




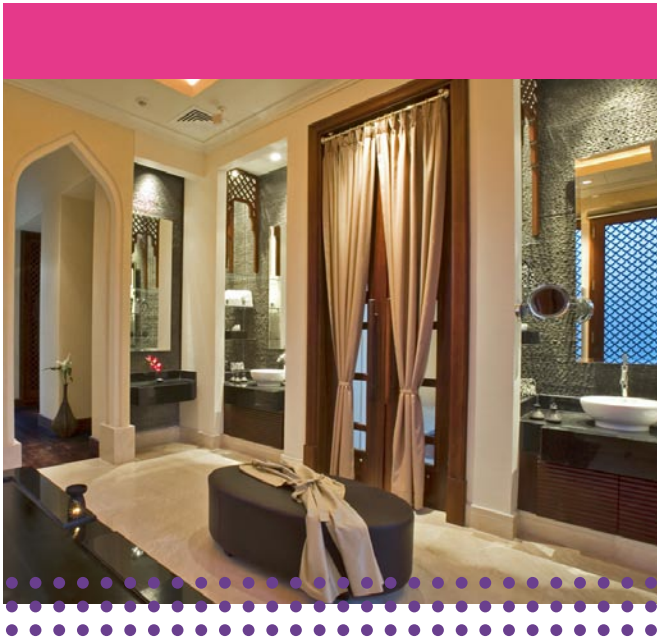
ONLY THE BEST WILL DO



With quality and reliability the priorities, Alcatel-Lucent was the natural choice for Bahrain's most superior resort complex



Designed to cater for the world's most prestigious VIP guests, the Banyan Tree Spa and Resort, Al Areen in Bahrain needs the very best and most reliable communications system. The Alcatel-Lucent **OmniPCX Enterprise** (IP Telephony) combined with Alcatel-Lucent **OmniSwitch** (Network Infrastructure) provided the perfect solution for fully managed and integrated wired/wireless triple play.



The first Banyan Tree Resort was launched in Laguna Phuket in 1994 and since that time the group has grown considerably. Today it owns or manages 18 resorts and hotels, 49 spas, 53 retail galleries and two golf courses in the Asia Pacific region.

Banyan Tree Hotels and Resorts (www.banyantree.com) are regarded as being amongst the best and most prestigious in the world and the latest addition to the chain is one of the most luxurious yet.

In April 2007 Banyan Tree Hotels and Resorts have unveiled their first Middle East property in the Kingdom of Bahrain. Nestled in the heart of the Arabian Desert, the specially commissioned property is one of the most luxurious and extensive spa resorts in the world. Offering travel connoisseurs a new address, the property is part of the prestigious Al Areen development initiative, spearheaded by one of the leading Bahrain-based investment banks, Gulf Finance House B.S.C.

Even before the full opening, its reputation as a retreat that personifies luxury had spread far and wide. The resort is only a few minutes from the Bahrain F1 Grand Prix Circuit and when the opening race of the 2006 season took place there in March, Banyan Tree was asked to provide accommodation for some of the most important VIPs.

By this time, Alcatel-Lucent and its business partners, Al-Falak and Intercol – leading IT and communications solutions providers in the Middle East – had been selected to supply a fully integrated and secured converged solution that would provide IP telephony, digital video and television, and both wired and wireless data networking across the entire site. It is the first fully IP-enabled triple-play installation in the Kingdom of Bahrain.

The Al Areen Holding Company was responsible for the installation of the IP systems in the resort. Ms Hélène Poirier, ICT Consultant at Eacom WLL, worked with the company on the network design, selection and implementation. She says that the first challenge that Alcatel-Lucent and its partners faced was to provide full mobility across the entire location. “Guests do not stay in their villas all the time and at a resort of this standard they expect the service and facilities to be absolutely impeccable. They will not want to wait for anything.”

Visitors would expect to be able to make and take telephone calls from anywhere on the resort which covers an area of two square kilometers, so the IP telephony network has to be capable of covering this area reliably. They would also expect to be able to use the telephone anywhere within their villas, which are substantial in their own right: the one-suite Desert Pool Villas cover around 400 square meters while the 2-suite Royal Pool Villas cover 720 square meters. Each one is equipped with two to four physical connections to the resort network, two or three wireless access points, and several IP telephones.

The communications also needed to be very robust and technically excellent. The Banyan Tree Spa and Resort, Al Areen in Bahrain is peppered with swimming pools, fountains and other water features and water can cause interference problems with wireless communications signals. Any solution needed to be able to cope with this and with the concrete external walls of the villas themselves. “It was quite a challenge,” says Ms Poirier, “as we had to deliver the highest standards. The resort wanted state-of-the-art equipment that would be both invisible and pervasive, and also wanted them to be easy to use and aesthetic.”

“We are extremely happy with the Alcatel-Lucent solution. It has met all our needs, we have not had to make any compromise and it provides excellent overall value.”

**Mr. Waleed Saffy,
General Manager, Al Areen Holding Company**

Systems would also need to be easy to maintain. Guests would expect an immediate response if any fault was found with their equipment in the villas. “The Alcatel-Lucent IP fixed and wireless phones are ideal,” says Ms Poirier, “as they are managed from a central point and have no intelligence of their own. They can simply be swapped out if there are any problems and the wide range of handsets on offer enables suitable devices to be deployed in different parts of each villa.”

The data connectivity provided to guests needs to be high bandwidth since, as well as Internet access and voice services,



Case study • Hospitality

the resort is also providing digital television and video-on-demand facilities. This means that each villa needs a hard-wired connection to the resort network. A fiber-optic infrastructure had already been installed to meet this need during the resort construction.

As well as enabling guests to communicate, resort staff need to be able to contact each other immediately, wherever they are on the complex. It has been decided to use wireless IP telephones for this purpose, rather than walkie-talkies. The IP phones would be quieter and less intrusive – they would look better and be more in keeping with the resort’s up-market atmosphere.

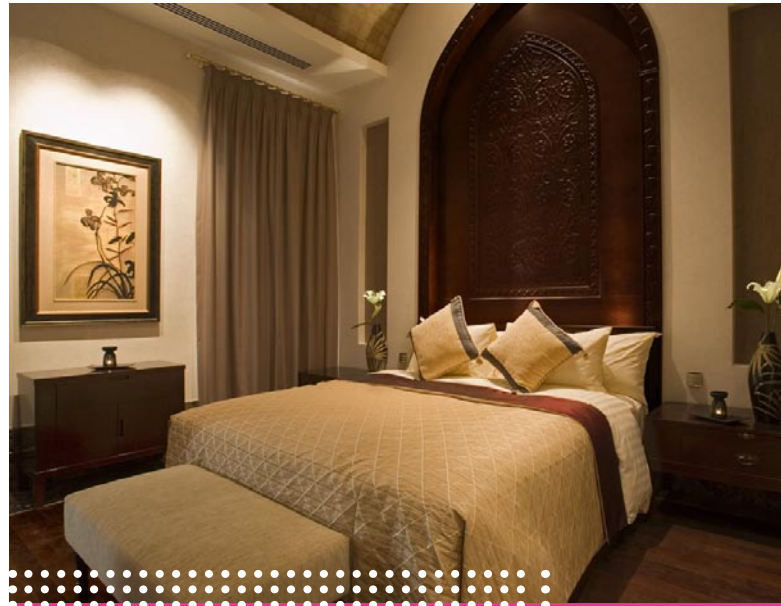
These communications also need to be very reliable as a team of staff are permanently patrolling the resort in buggies, ready to pick up guests and take them to another part of the resort, at a moment notice. The group calling capabilities of Alcatel-Lucent’s systems have proved particularly useful here. The resort can create up to eight separate caller groups, enabling each member of different teams – such as the buggy drivers – to be contacted at the same time. Guests can even call the drivers’ group themselves directly.

Late in 2005, working closely with the Executive Committee of the Al Areen Holding Company, including its general manager, the investors, the architects and the resort operators, Ms Poirier put together an invitation to tender that detailed all these requirements. “There was strong competition for the contract from both Cisco Systems and Nortel but in the end, the choice was simple,” says Ms Poirier. “We chose Alcatel-Lucent because they had a complete and integrated solution, were extremely professional, prepared to work very closely with us and also very willing to work under some extremely challenging conditions. They were very committed to the project,” she states.

The challenges were considerable, from both a technical and a physical perspective. During the initial stages of the installation, there was no reliable supply of electricity, extreme heat and the constant presence of dust made the conditions very difficult for engineering staff.

Alcatel-Lucent and its partners coped admirably with these hazards and were able to meet all the resort’s technical requirements. Fully managed high quality Level 2 switching capabilities are provided for the villas, support for virtual private networks (VPNs) and Virtual LANs (VLANs) associated to a firewall and intrusion detection system secure all connections within the campus as well as to remote data networks, and Power-over-Ethernet (PoE) capabilities are there to support the IP telephones and wireless access points located within the villas and across the resort campus.

Ms Poirier says: “The whole system needed to be both manageable and secure, and Alcatel-Lucent came up with the best solution.



CHALLENGES

- Need to provide highly reliable and secure connectivity across a two square kilometer site to support voice, data, TV and video over IP
- Wireless mobile connectivity required for staff across the site – with immediate group connection
- Easy maintenance and management required to meet high customer expectations

SOLUTION

- Alcatel-Lucent **OmniPCX Enterprise**
- Alcatel-Lucent L2 **OmniStack 6200** stackable switches
- Alcatel-Lucent L3 **OmniSwitch 6800** core switch
- Alcatel-Lucent **OmniAccess WLAN** wireless network switches
- Alcatel-Lucent **OmniAccess** wireless access points
- Alcatel-Lucent **IP** fixed and wireless **phone** handsets
- Alcatel-Lucent **OmniVista** network management
- **Fortinet** firewall and intrusion detection system

BENEFITS

- Full voice, data, TV and video connectivity across the entire site
- Immediate communication with key groups of staff
- Secure connectivity for guests – via centralized management, firewall, IDS, VPN and VLAN support
- Ease of maintenance ensures customer service expectations can be met and costs controlled



It was just what we needed and also very reasonably priced. We were not asked to compromise on what we wanted to do in any way. It was just spot-on in every sense.”

The centralized control provided by the Alcatel-Lucent **OmniPCX Enterprise** system means that the entire network is very easy to manage and secure. Indeed the system has all the advanced features that the Banyan Tree Desert Spa and Resort needs to meet the high expectations of its guests. Alcatel-Lucent’s experience in providing systems for resorts has been of huge benefit.

As well as the central Alcatel-Lucent **OmniPCX Enterprise** and **OmniSwitch** devices, a total of 80 **OmniStack** Ethernet switches, 200 **OmniAccess** wireless LAN access points and 400 Alcatel-Lucent IP phones have been installed to provide telephony, Internet and data connectivity, and digital video feeds right across the complex.

“This implementation is an excellent example of how well Alcatel-Lucent’s solutions and its highly-capable and motivated business partners can deliver excellent results,” says Jean-Michel Pain, Key Accounts Manager for Alcatel-Lucent.

“Alcatel-Lucent’s solutions are very well suited to complex converged networks where wireless capability and secure end-to-end connectivity are requisite. It also demonstrates that Alcatel-Lucent along with its business partners is a supplier that wants to help customers achieve their aims and not simply win the business, and is prepared to be flexible and adapt to customer needs,” he added.

It also demonstrates how well Alcatel-Lucent and its business partners are able to co-operate and bring together all the skills required for a project. Al-Falak provided much of the networking installation and integration services, while Intercol provided expertise in voice systems. Alcatel-Lucent professional services brought the final touch to perfect the solution. “For the Banyan Tree Desert Spa and Resort itself, the results have been excellent,” says Mr. Waleed Saffy, General Manager Al Areen Holding Company. “Working with Alcatel-Lucent and its partners has been a wonderful experience. They were at all times professional, courteous and efficient. Without their flexibility we could not have got the resort ready for the 2006 Bahrain Grand Prix, which was very important for us, as it announced our arrival on the world stage.”

Installation work had to be accelerated ahead of the event, as the resort was only informed that it would be expected to accommodate 13 VIP guests of the very highest status a few days before they were due to arrive. “Both Alcatel-Lucent and their business partners were available 24 hours a day to meet any emergency requirement,” says Mr. Saffy. “They were extremely supportive and worked around the clock to ensure that we could get everything ready.”

As the full opening of the resort has now occurred, Mr. Saffy declares himself to be extremely pleased with the work that Alcatel-Lucent and its partners have done at the Banyan Tree Desert Spa and Resort. “We are extremely happy with the Alcatel-Lucent solution. It has met all our needs, we have not had to make any compromise and it provides excellent overall value.”

www.alcatel-lucent.com

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