**Tropical Islands Resort
Berlin-Brandenburg**

MOBOTIX
C A S E S T U D Y

Network Video: Relax Safe And Sound

Exotic Environment

The jungle path winds its way through the rainforest. Around 500 different types of plants and up to 14-m high, sometimes extremely old trees grow here. The path leads past a waterfall, and a narrow footbridge spans the mangrove swamp. It is warm about 28° C, with close to 60 % humidity. The air is full of the scent from the plants and a concert of birdsong. The forest opens up to a clearing and provides a breathtaking view of the lagoon: dark blue water, white sand beach...

A tropical paradise, you think - but it is approximately 5,800 km north of the equator and about one hour's drive away from Berlin. In the world's largest freestanding hall, 66,000 m^2 and five million m^3 of interior space, the Tropical Islands Resort Berlin-Brandenburg in Niederlausitz is an authentic man-made tropical landscape.

Bali Lagoon And Tropical Village

The huge hall is able to accommodate approximately 7,000 people at one time. The 10,000 m^2 of rainforest is a world of its own that can be explored on a one-kilometer-long jungle path. The pleasantly warm South Seas with its long stretch of beaches invites visitors to just relax or to swim in the Bali Lagoon with its grotto and waterfall, channel with current and water slide. The tropical village, with buildings originating from Thailand, Borneo, Bali, Polynesia, the Amazon and Kenya, also features exotic food in the restaurant, and a colorful show is performed on Europe's largest covered water stage each evening.

The whole idea of building this paradise originated with businessman Colin Au, who comes from Malaysia. He envisioned bringing the tropics with its beautiful, warm weather to cold, gray Germany, a vision that has also created jobs. The Tropical Islands Resort employs more than 500 people to take care of their guests while 13 MOBOTIX cameras ensure that the visitors can just relax and put their feet up, with no worries about security.

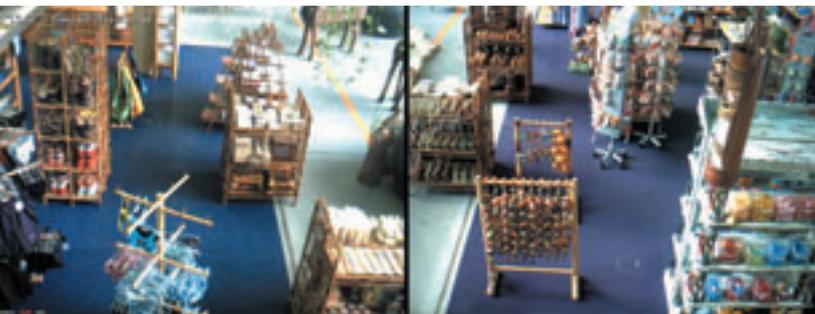**Security Vision Systems**

MOBOTIX AG

Relaxation and fun in the tropical paradise: MOBOTIX technology provides safety and security (photos to the right and below are original camera images).

Keeping An Eye On Paradise

Long Story

MOBOTIX' presence in the hall, which is 360 m long, 210 m wide and 107 m high, began long before the tropical paradise was built. At that time, the facility was used by Cargolifter AG. In this most adventurous project in aviation

history, a gigantic airship was built to fly loads of up to 160 tons from one continent to another. First-generation MOBOTIX cameras were already used in the very generously dimensioned hangar in 2001. "At that time, we wanted to record everything that was happening around the Cargolifter in the hangar," remembers Christian Heinrich, who worked as a system administrator for Cargolifter AG at that time.

Unfortunately, the ambitious Cargolifter project was destined to fail; the Tropical Islands Resort moved in in 2004 and the MOBOTIX cameras stayed, along with

Christian Heinrich, who switched employers, but basically kept the same job. "When we first became interested in web cams, we checked a competitor's product and found that it wasn't nearly as flexible, but much more expensive. At that point, we realized that MOBOTIX is exactly what we needed to meet our needs. And we've remained loyal customers ever since."

Better Delivery

The cameras are still mounted on different arches throughout the hall and provide a fantastic view of the South Seas or the tropical village. Meanwhile, the camera system has to do much more than just watch what happens in the hall. A number of different public authorities and the company guidelines require that the facility is monitored at critical points. In the area where guests spend the night in small, rented igloo tents, for example, the security staff also uses the MOBOTIX cameras to keep a close eye on all the places where money transactions take place: at the check-out and in merchandising, at the cash counters and in the safes.

Needless to say, access control also plays an important role: the staff entrance, the delivery gate and the server rooms are also monitored by MOBOTIX technology as are all the other access routes to the facility. In every

location, each camera has to perform two tasks at once: to monitor what vehicles enter the facility and to record statistical data with the help of license-plate recognition. This makes it possible to identify which regions the guests come from.

Passwords Regulate Access

To get to the needed images quickly, Tropical Islands has an Intranet website with a map of the facility and the corresponding camera locations, which enable the security staff to navigate with high precision. Specific passwords ensure that staff members have access only to the areas that have been assigned to them. Security staff, for example, have access privileges that are different to those of the staff at the tent rental.

Complex Network

The entire system is based on a complex network with different WLANs. "Each camera in our system has its own DHCP address, which is managed by the network," explains Christian Heinrich. "As a result, we can easily change the location of the individual cameras because the system is able to identify them directly and to connect them automatically."

Needless to say, the wide range of recording opportunities provided by MOBOTIX is also a great advantage. "We need these features in order to be able to clear up any irregularities after the fact," Christian Heinrich says. "We use the memory already integrated in the cameras as well as two redundant file servers, each of which has a capacity of 500 GB." With the help of a ring buffer, the camera images are stored on the servers for 28 days. Some of the cameras are event-controlled so that only the images triggered by an event are recorded. That saves a lot of valuable hard-disk capacity.

Amazing Opportunities

"The MOBOTIX cameras offer us amazing opportunities and a great deal of flexibility," the system administrator continues. "The great value for money was another point that had us convinced and that's why we decided to stick with this technology." Apparently so since plans have now been made to monitor the outside offices and another access route – of course, again using MOBOTIX cameras.

D12 Dual-Fixdome Outdoor

D12 Dual-Fixdome

Two image sensors for 180° panorama images

Covers RJ45 wall outlets

M12 Day/Night

M22 Mono/CF

Microphone

Motion detector

Speaker

MOBOTIX Technology –
Cost Savings in Every Aspect

High Resolution For Sharp Images

All MOBOTIX cameras are high-resolution cameras with integrated image storage and 960 lines (1280x960 pixels) resolution. The **stored image** thus contains 12 time more detail for creating zoomed sections of the image than regular cameras with 240 or 288 lines (CIF, 2CIF). This is why one single MOBOTIX camera with a 90° wide-angle lens is sufficient to monitor an entire room and yet provides more detailed images than traditional technology. The MOBOTIX Day/Night cameras feature zero maintenance with one color and one B/W image sensor.

Intelligent Storage Technology Uses Fewer DVRs

The new, decentralized storage technology pioneered by MOBOTIX reduces the number of recorders that store the smooth high-resolution video by up to 90%. 40 cameras store smooth video streams including audio on a single PC, each managing its own ring buffer and database. Intelligent search features provide swift access to the stored events. There is no software required for storing and managing video, eliminating license fees and the need for expensive software. Event-controlled recording and automatic increase of frame rates upon detecting movements drastically reduce the storage requirements.

Low Power Consumption Means Enormous Savings

Since MOBOTIX cameras are anti-fogging, do not require heating and only use 3 Watts each, power can be injected into the network cabling using standard PoE products, year round. This drastically reduces the amount of cables and the power requirements for backup power.

Integrated Telephone Features

All MOBOTIX IT and Secure models feature bidirectional audio support. The built-in microphone and loudspeaker are used for live audio transmissions and storage purposes. Voice messages with PIN confirmation and call forwarding via IP or ISDN telephony have been integrated as well. Using the switch outputs, you can switch lights or open doors from the phone or from the computer.
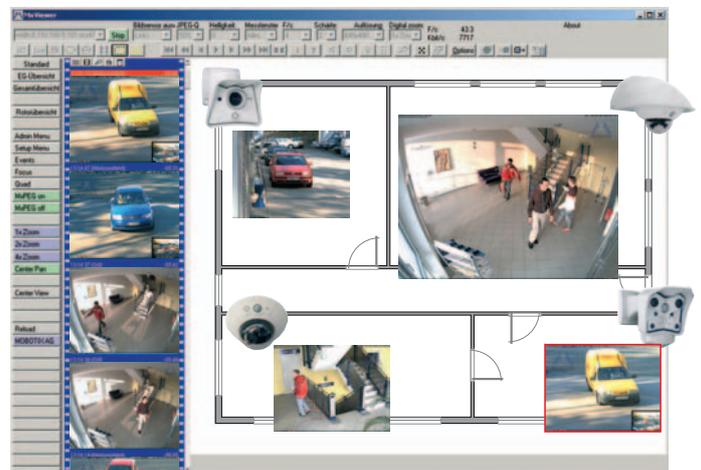
Robust and Well-Protected

The fiberglass-reinforced housing is shockproof and the SecureFlex mount protects the network cabling as it completely conceals the cables (M12/D12 models). Weatherproof (IP65) from –30° to +60°C (-22° to +140°F).

High Return on Investment

Since the number of cameras and storage capacity are freely scalable and any kind of data connection can be used (ISDN, DSL, Ethernet, Wireless, GSM, copper, optical), MOBOTIX means high ROI, even years after installing.

State-Of-The-Art Technology

Developed and manufactured in Kaiserslautern, Germany, MOBOTIX produces image-storing weatherproof high-resolution cameras, including lens and wall/ceiling mount for as little as 598 EUR excl. VAT. To date, more than 100,000 cameras have been sold worldwide.

Download **MxViewer** alarm management software free of charge. 30 cameras with 30 fps each, layout editor, remote alert notification

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