

Face Recognition Solution

Lemon Tree Hotels



Enhancing security with cutting-edge, intelligent face recognition technology.

Introduction

The need for the hospitality industry to raise the level of security at their properties has gone up significantly. Recognizing this, Lemon Tree Hotels amplified the existing security measures at their upscale hotel, Lemon Tree Premier, Delhi Airport, New Delhi, by adopting NEC's top-end face recognition solution which can help hospitality businesses deliver a more secure and elevated guest experience.

Challenges

Situated in the upcoming Aerocity Hospitality District, in close proximity to the international airport, Lemon Tree Premier needed to have a top-end surveillance and security system.

The sheer number of people visiting any hospitality property during the day makes it very tough for the security personnel to keep tabs on everyone. Thus the surveillance of the 10-storey, 81-room Lemon Tree Premier was recognized as a significant challenge as it was difficult to track all that was happening throughout the property.

Another challenge was to identify the solution that would be the best fit with the detailed mandate and prescribed guidelines provided by Indian security agencies.

Additionally, the hi-tech face recognition solution required the hotel to invest in upgrading the existing IT infrastructure. Both the IT and the Security teams had to rapidly move up the learning curve, in order to suitably test, deploy and man the solution.

Customer

- Lemon Tree Hotels Ltd.

Challenges

- Top-end Surveillance & Security system for keeping a track on sheer number of people visiting the hospitality property
- Identify the solution that would be fit with detailed and prescribed guidelines provided by Indian security agencies.
- Hi-Tech technology, aiming at upgrading IT and security teams to build secure infrastructure.

Solution

- NEC's Face Recognition solution is designed to capture fast and accurate facial images from LIVE CCTV camera and matched captured faces to the database at the backend in real time with auto generated alert.
- Strength lays in its high tolerance for poor quality, highly compressed surveillance video and web images
- The Solution enables white-list and black-list management for enhanced customer service.

Results

- NEC's face recognition solution sets a new standard for security in hospitality sector in India with the assurance of no time gap between identification of an individual and personalized reaction in real-time basis.

Solution

Lemon Tree Premier, Delhi Airport needed a solution that helped identify faces throughout the property with high accuracy and auto generated alerts. Stated Rahul Pandit, President & Executive Director, The Lemon Tree Hotel Company, “Being the 3rd largest hotel chain in India, by owned and operated rooms, safety and security of guests has always been paramount to us. At Lemon Tree Premier, Delhi Airport, our flagship hotel it was thus essential that we adopted a solution that would merge innovative and path breaking technology with accuracy and consistency, but most importantly met the stringent guidelines defined by the Indian Security agencies.”

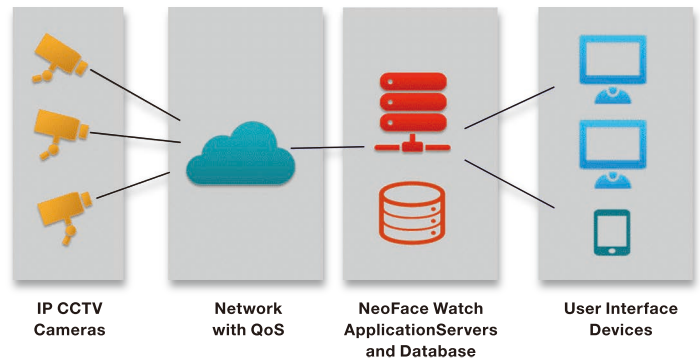


NEC’s face recognition solution is designed to capture fast and accurate facial images from LIVE CCTV camera over a standard IP network and undertake matching the captured faces to the database at the backend in real time. The greatest advantage of the solution lies in the fact that the hotel staff need not disturb the guests in order to verify their identity since it captures facial images from a distance.

Describing the project in detail, Project Head, NEC India said, “We were asked for a security system that would let the hotel staff identify a visitor even before he entered the hotel. This required us to engage deeply with the hotel security team to not just understand their exact requirements, but also conduct numerous Proofs of Concept (POCs) to demonstrate the value proposition of our face recognition solution”.

“The strength of NEC’s face recognition technology, NeoFace®, lies in its tolerance of poor quality images. With high tolerance for low quality, highly compressed surveillance videos and images, including web images, the system has the capability to register and generate match results for the control of both ‘black-list’ and ‘white-list’ images using digital photographs. The captured face is compared to all facial templates in the database, irrespective of any attempts by the person to conceal identity via the usage of

caps, hats, glasses or slightest change in the facial hair,” added the project head. “This helps determine whether the person is blacklisted or a welcomed VIP customer for the particular facility.”



“Also, the hotel management is very interested in exploring the ‘white-list’ management that notifies the staff to the presence of a VIP customer and thus enables them to offer exclusive access or privileges to the guests as a part of enhanced customer service. As a result, every time the guest approaches the front desk, the staff will get a pop-up with the details of the guest, which will enable them to greet the customer by name and provide appropriate services.”

Results

NEC’s face recognition solution definitely sets a new standard for security in the hospitality sector in India. The solution deployed was tested for various use cases and potential challenges in recognizing a facial image captured from a live CCTV camera and it delivered accurate results every time. The ability of the solution to respond in real-time is a great advantage as it ensures there is no time gap between identification of an individual and personalized reaction by the hotel staff.

“We are confident that with face recognition solution deployed at the property, we will be able to provide a much improved security setup and hence better customer service at Lemon Tree Premier. The technology is perfect for providing unobtrusive and seamless 360° security; and the fact that it can be monitored remotely provides that additional piece of mind.

We are currently evaluating its application for ‘white-list’ management of our VIP customers to provide a personalized experience and believe it will provide the additional differentiation in our customer service,” added Mr. Pandit.

