

Dental Council of India



“...with the help of biometric technology, we were able to achieve complete security hence the possibility of any mis-use was eradicated. The colleges around the country have greatly appreciated this project as it has helped in building a central system accounting for all dental college faculties around the country.”

Dr. Anil Kohli
President
Dental Council of India



HID Global Helps Streamline Time and Attendance Process

The Dental Council of India (DCI) was incorporated under The Dentists Act, 1948 to regulate dental education and the profession throughout India. It is financed by the Ministry of Health and Family Welfare (India) and through the local state dental councils. The objective around establishing DCI was to: 1) maintain uniform standards for dental education across 290 dental colleges in India; 2) standardize the curriculum for training of dentists, dental hygienists, and dental mechanics; and 3) regulate the level of examinations and qualifications.

HID Global implemented a smart card solution to help DCI with the time and attendance recording of their lecturers. Since college faculty members are very often transferred to different locations, HID’s solution helps authenticate the cardholder’s identity using biometrics technologies to avoid malpractice while enabling DCI to monitor the database and centrally record faculty attendance. This new solution replaced the manual attendance record system, saving 50% operational and avoiding the human errors.

Challenges

In the past, the DCI issued paper ID cards to its faculty with a manual attendance and payroll system in place to manage attendance record and payroll calculations. This system gave rise to unauthorized practices such as “buddy punching”, where a colleague would record the attendance for absent faculty members.

The DCI needed a centralized, standard identification system that could authenticate cardholders’ identities as well as manage staff attendance records.

In summary, the challenges faced by DCI included:

1. Absence of a standard identification system leading to conflicts and malpractices
2. Manual data entry of attendance and payroll, resulting in a high percentage of human error.
3. Manual maintenance of records, which increased processing time.
4. Real time status reports unavailable for audits.

Objectives

After a detailed analysis, DCI identified key objectives for this project:

1. Creation of a central attendance record system that allowed DCI to monitor attendance records for almost 300 dental colleges across India.
2. Reduction in operational costs by eradicating the manual attendance process and associated paperwork.



Solutions

Working with its Network Access Solution (NAS) OEM partner, Rasilant Technologies, HID Global offered a biometric smart card solution for identity authentication and attendance tracking.

Each faculty member under DCI was issued a smart card that stored the users' fingerprint templates and personal data. SmartID™ SB10 biometric readers were installed at faculty offices for recording attendance at every college. Each user had to present both their smart card and fingerprint for identity verification.

SmartID SB10 biometric readers were connected to EDGEPlus™ E400 controller via Wiegand. The entry records were then uploaded to the central server through an E400 controller over a TCP/IP network.

Featuring an open architecture, EDGEPlus E400 controller was integrated with DCI's faculty management module using Rasilant's software. As a result, all of the RFID readers across all colleges under DCI were integrated on a single network, offering a web-based solution for real time reporting.

PHASE 1:

- Unique RFID HF Cards been issued to every faculty under DCI.

HF RFID CARDS



PHASE 2:

- Biometric RFID readers and controllers installed in every college under DCI.
- Biometric RFID Readers integrated with the RFID HF Cards issued to faculty at colleges.
- The Biometric RFID Reader integrated with a Faculty Management module.
- Reader will generate real-time faculty status in a central terminal at college.

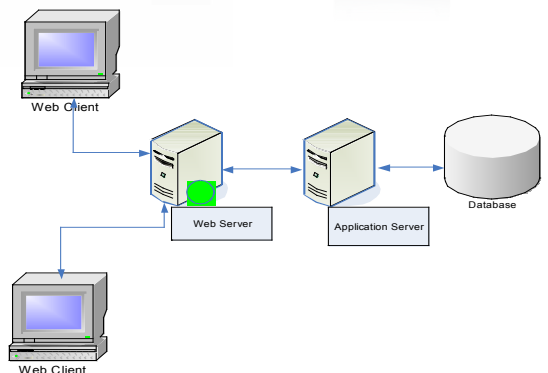
BIOMETRIC RFID READER & CONTROLLER



PHASE 3:

- All readers across colleges under DCI integrated on a single network.
- The system is now a web based solution.
- A central terminal at DCI allows single-point access and viewing of real-time data of a faculty/college at any time.

WEB BASED TERMINAL AT DCI





Results and Benefits

290 HID SB10 readers and 290 E400 controllers were successfully installed in all the dental colleges.

“The TagFaculty project was initiated with the council’s vision to ensure education in Dental colleges around the country is imparted fairly and we have seen tremendous success since its implementation,” said Dr. Anil Kohli, President of the Dental Council of India. “The system ensures that faculty in each college are authenticated in real-time, allowing the college authorities to streamline their courses and schedule for the students who ultimately benefit from this. With the help of biometric technology, we were able to achieve complete security hence the possibility of any mis-use was eradicated. The colleges around the country have greatly appreciated this project as it has helped in building a central system accounting for all dental college faculties around the country,” said Kohli.

Benefits:

1. The central management system enabled real-time records to be transmitted to a central server, avoiding any malpractice such as falsifying records.
2. Identity authentication of the cardholders eliminated inaccurate attendance recording on behalf of cardholder and reduced erroneous salary calculation.
3. Once installed, the smart cards can also be used for library management, canteen management or any other ePurse application in the future.
4. The application also provided attendance function for the faculty members visiting other colleges. Originally intended to ensure that the faculty properly logged in at their designated college, this application also ensured that faculty did not teach in more colleges than designated, which supports government guidelines.