

# Beyond Biometrics

FingerTec in Retrospect

**timeTec**  
www.timeteccloud.com

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## Foreword

From the Group CEO

# Winter is Coming? Or is it Spring?



*Winter is Coming* is the motto of *House of Stark*, one of the greatest houses of Westeros in the HBO medieval fantasy television series *Game of Thrones*; conveying the meaning of warning and constant vigilance. Hearing someone whisper *Winter is Coming* can send chills down one's spine, thinking of the harsh winter and the roaming white walkers.

We can almost be certain that *Winter is Coming*, because the business climate is volatile when the second wave of IT evolution hits, unlike the first wave that just cracked the surface to improve business efficiency, this second wave travelled straight to the bone marrow, affected the in-depth business ecology and disrupted the outlook of the entire business world.

You should feel the chills, if you still think you can maintain the same business operations without transformation. You should feel the chills, if you haven't turned your conventional non-IT company into an "IT company". For an IT company, you too should feel the chills, if you're still selling your IT products outright, without consuming

your own IT products to fuel your own business operations. Google, facebook, Amazon, Groupon, Uber, Airbnb, LinkedIn, and almost all of the newcomers are no longer selling their own-developed technologies but they deployed them for better profitability.

*Winter is Coming* when Big Data, IoT (Internet of Things), Cloud Computing and SaaS (Software as a Service) come as foes rather than friends for those unsuspecting. They are the digital omens in the mobile Internet era emerged to haunt your business. These buzzwords are not hoaxes; everyday they are becoming our new reality.

We sped our transformation by allocating 60% in R&D expenditure, and R&D is quickly becoming the largest department in our company this year. We have added [www.i-neighbour.com](http://www.i-neighbour.com), a visitor management system for residential communities; And [www.timetecpatrol.com](http://www.timetecpatrol.com) for guard tour system into our cloud application portfolios, on top of [www.timetecta.com](http://www.timetecta.com) for time and attendance. Additionally [epicamera.com](http://www.epicamera.com) was added for cloud surveillance. We expect to launch our cloud e-leave and cloud hire as part of our workforce management in 2017.

We have to reshape, readjust and fine-tune our operations to cope with the subscription-based model. We had a very busy year in 2016, and would be more diligent in 2017.

As for [www.timetecta.com](http://www.timetecta.com) cloud attendance system, we have tripled the revenue for the last two consecutive years and expecting three to four times hike in 2017. The steep climb of the sales figure sends a strong excitement to our bloodstream, keeping us marching forward.

Winter is short or snow has never fallen on companies that have prepared. Perhaps, for those who have prepared, you will be getting stronger, and be able to breathe soothingly, because Spring is Coming.

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# Beyond Biometrics

FingerTec in Retrospect



# 2016 Milestones



It has been another challenging yet rewarding year for us in this journey to achieve the status of a reputable cloud solutions supplier in the workforce & security industry. The biometrics segment of the business continues to improve with the latest hardware and software offerings that proved to convenience customers the world over. Join us, as we take a step back to reminisce about our journey in 2016.

## ★ TimeTec is CMMI Level 3 Certified

TimeTec Computing Sdn Bhd is a proud recipient of certification for CMMI Maturity Level 3 Development on the 15th of January 2016. To gain Maturity Level 3, an organization must have expertise in 3 processes; process management, technical & operational work of delivery (development or services, etc.), and organizational change and development. "Implementation of CMMI is aimed to define the entire software development process for the company and to ensure the R&D department adapts and practices the processes in our daily operations. The CMMI also has improved the standard and quality of all our current and future deliverables within the software development cycle, which consists of all our TimeTec Cloud solutions development as well as Ingress software development", said Mr Daryl Choo, the Chief Technology Officer who is also the Head of SEPG and Project Director for CMMI Project.



## ★ TimeTec Files for Patents

Patents project a positive image for companies as it demonstrates innovation and expertise. In view of its importance for our business, TimeTec have filed a list of patents to protect our technologies. In October 2016, the U.S. Patent Office approved the Company's submission on A System & Method for Transferring Electronic Information. According to Mr Teh Hon Seng, CEO, "The company is in the process of establishing an intellectual property depository, with this patent approved, 2 more U.S. filings in process, 6 filings done locally and another 6 submissions in the pipeline. These applications cover biometrics devices, attendance and cloud systems. With these patents in place, TimeTec Computing will be well-positioned as one of the leaders in biometrics, cloud technology in attendance and various areas of concern".

## ★ TCMS V3 Replaces the V2

As of February 2016, customers buying time attendance products from FingerTec may opt for TCMS V3 as a bundled software option in place of its predecessor TCMS V2. The TCMS V3 contains all the features of TCMS V2 and more. The V3 UI is more user friendly than ever. With the adoption of the new Ingress's ribbon design, the look and feel of the software is now clean and crisp. The TCMS V3 is programmed on MSAccess platform, which simplifies configurations and it will be offered on MySQL to sustain larger databases. It wasn't until October 2016 that the bundling of all time attendance products with TCMS V3 was officially announced. Customers were given ample time to make the switch from TCMS V2 to TCMS V3 before we say adieu to TCMS V2 that has served us for more than a decade.

## ★ Mobile Magnitude

Mobile technology has become today's lifestyle and TimeTec Apps development has to progress in tandem with the rest to remain relevant and appealing to the market. In 2016, we focused on mobile-UX and added useful features for customer's convenience. If we can get things done through smartphones effectively, PC should become secondary. With that notion, TimeTec TA App has included features such as viewing of schedule,

management of rosters, calendar view of schedule, and many more. TimeTec Patrol makes use of smartphones as a tool for patrolling guards, and i-Neighbour enriches its features to cater a visitor management system perfectly for its users.

## ★ TimeTec Patrol Takes Off

TimeTec Patrol Beta version is made available starting this November 2016, a cloud solution for guard management and monitoring system that cut frills on patrolling and administration tasks day-in, day-out for security firms. There are two parts to TimeTec Patrol, one is the web solution at [www.timetecpatrol.com](http://www.timetecpatrol.com) and another is its Patrol App available on Android phones. The TimeTec Patrol solution is the platform for security firms to manage their patrolling sites, customers, guards, routes, monitor sites, and many more. Patrol App is the tool for the security guards to use during their patrol duties, embracing the BYOD concept with Android devices. TimeTec Patrol accommodates security firms having customers at various sites and wanting updates of their guards activities in real-time through cloud technology.

## ★ i-Neighbour Modernizes Visitor Management System

The solution taps on the latest cloud technology, mobile application and the power of Internet connectivity to improve today's lifestyle and provide better security for the residents of high-rise condominiums and gated guarded community. i-Neighbour is an all-inclusive system that brings everybody (Residential Management, Residents, Security Company and Visitors) together to ensure security of a neighborhood. Once a residential management or a JMB sets up a neighborhood, i-Neighbour is ready to receive visitors easily through mobile app and web version. Embrace modern lifestyle with i-Neighbour Visitor Management System and register with us now at [www.i-neighbour.com](http://www.i-neighbour.com).

TimeTec is an organization that progresses with a we-can-do-it attitude. We will keep on churning new developments and find ways to assist and satisfy the market the best we could. @





# 2016

## Product Highlights







Amazing cloud software to manage employee's information, attendance, scheduling and roster assignment from any device, from anywhere in the world, derived from one central and secured location. As today's workforce becomes more dynamic, it's time for businesses to automate the HR process in attendance to improve accuracy, eradicate redundancy and achieve data accuracy of related HR activities. The Internet of things reduces the reliance of personal computers in the workplace and TimeTec TA is designed with staff's mobility in mind. TimeTec TA App taps on GPS technology to monitor employee's mobility.

*TimeTec TA is the go-to HR attendance solution for all organizations.*



This is a revolutionary guard patrolling system utilizing mobile, cloud and NFC technologies. TimeTec Patrol mobile application lets guards-on-duty to check in their specific whereabouts using NFC technology through their mobile phones and for them to report on incidents during their rounds for real time consolidated updates, giving the management clear overview of security status at any given time. Data collected from TimeTec Patrol is valuable for assessment of each guard's productivity, and the overall effectiveness of guard patrolling system in place.

*TimeTec Patrol tailors to security firms having guards at multiple client sites.*



i-Neighbour modernizes visitor management system with the use of cloud and mobile technologies. The solution lets a community take control of their visitors and collectively keep the neighbourhood safe by only allowing good visitors into the neighbourhood and keeping the bad ones out. Visitor invitation can be done by both parties (visitors and visitees) through the web and the mobile app, and once the invitation has been approved, a QR code will be sent to the visitors for easy check-in. With i-Neighbour, all records of visitations are intact in the cloud and retrievable if required.

*i-Neighbour is a cloud-based visitor management system for high-residential and gated-guarded residential community.*



Tailored for time attendance solution, TCMS V3 is FingerTec's latest bundled software for its time attendance products. Loaded with all features of TCMS V2, TCMS V3 is offered in MSAccess, suitable for various systems and capable of so much more than TCMS V2.

*TCMS V3 gets your time attendance data right, effortlessly.*



FCC is a web platform to store all FingerTec terminals' information and data securely on a cloud server. Connect your FingerTec terminals to FCC and stop worrying about data lost because the original data will always be available online for instant retrieval. FCC is a platform that enables you to consolidate all your data to the Cloud environment for viewing, managing and backing up of data purposes.

*FCC stores your data intact on cloud storage for safety and security.*



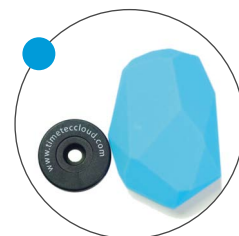


# 2017 Product Sneak Peek

In 2017, TimeTec continues to develop another four cloud solutions to complete the TimeTec Suite that will house all the cloud solutions for workforce and security industries requirements. At the same time, we embrace the concepts of IoT and BYOD with the introduction of our latest hardware selection.

## Time Beacon and NFC Tag

Time Beacon is a battery powered device to broadcast its unique identity continuously via Bluetooth to nearby smartphones or smart devices. When user reaches the Time Beacon zone, they can clock attendance using mobile App. Date, time and GPS location are captured and sent to TimeTec TA for attendance. NFC tag uses short range of Mifare technology to transmit its unique identity to smartphones or smart devices when user taps on the NFC tags. Embracing DIY and BYOD, installation and maintenance of these devices are easy and economical. Both devices can be used in TimeTec Patrol and TimeTec TA for guard patrol tasks and attendance respectively.



## FingerTec TA700W

TA700W is the latest time attendance terminal from FingerTec that is not only TimeTec TA compatible, but it is also cost effective and sleek in design. This new fingerprint biometrics terminal comes with the latest technology of optical scanner to deal with blurred fingerprints during enrolment and verification. With 180Mhz microprocessor running with 16MB RAM/8MB ROM and 2.8" 65k TFT color screen display, TA700W can support up to 3000 fingerprint templates (VX 10.0 algorithm only) and 100,000 logs. It is equipped with Wifi connection and USB flash disk as data transfer protocol.



## TimeTec Leave

Leave management system and holiday planner for today's offices, TimeTec Leave allows insertion of leave rules, leave limits and leave calculation settings and many more to achieve automation. This solution saves a lot of HR time attending to leave matters, which is tedious yet essential in small or large organizations. Online leave application is available through TimeTec Leave mobile app or the same application on any Internet browser, and managers can evaluate the applications for approval. Check leave balance, entitlement, restrictions and etc from TimeTec Leave for better leave management for sure. [www.timetecleave.com](http://www.timetecleave.com)

## TimeTec VMS

This is a visitor management system online that allows businesses to manage daily visitors coming to their premises. The solution offers visitors pre-registration option where visitors can get approval before their visitation date and administrators or security personnel can screen visitors to keep a clean sheet of visitor list at all times. Visitors' information are kept intact in TimeTec VMS for future reference as a security precaution. [www.timetecvms.com](http://www.timetecvms.com)



## TimeTec Hire

Recruitment solution for organizations to hire employees without necessarily having to employ third party services or agencies. Post job openings online for potential employees to apply and submit their credentials directly to the potential employer. TimeTec Hire provides organizations with a systematic way to collect data, assist in the screening process and merge the newly hired employee data with the current employment data in no time at all. Employers also have the option to link TimeTec Hire to social media or recruitment agency to gain more coverage and conversion. [www.timetechire.com](http://www.timetechire.com)

## TimeTec MW

TimeTec Mobile Workforce is an online and mobile tool for companies to let their mobile and static employees to collaborate more effectively in achieving the ultimate customers' satisfactions. By keeping your employees in contact with co-workers, vendors, and customers in a secured system, you can boost the productivity effortlessly without any worry. Close sales, solve problems, and respond to urgent requests more effectively by enabling employees to work virtually from anywhere. Improve service and satisfaction by interacting with customers in real time, on location or from a distance. [www.timetecmw.com](http://www.timetecmw.com)



## TimeTec Access

TimeTec Access is a product that controls security with cloud technology; it allows an alarm system to use Bluetooth I/O slaves to pair up with different sensors to secure your premises. With TimeTec Access, complicated Zone concept is eliminated because each sensor has its individual secure point. The installation is easy and safe, embracing DIY concept. From its mobile App, users can setup and configure the alarm system, and it comes complete with real time monitoring and operation from the smartphones to keep the surveilled premises in check. Push notifications are available to notify users during any incidents. TimeTec Access frees security solution from its limitations to offer customers security like never before.



# Dar Al Ber Society Dubai

## Connects Better with TimeTec TA

In 1979, Dar Al Ber Society of Dubai was formed with a vision to provide comprehensive expansion in the provision of charitable, humanitarian and cultural works. It became one of the first charities in Dubai to achieve this feat. Over 37 years of its establishment, the charity has grown nationwide with more than 400 employees in 15 locations. 5 years ago, Dar Al Ber Society deployed FingerTec biometrics devices in 9 of its location but they were having problem centralizing the data from all the different branches. Mr Shahjahan Rashid, Head of Data Center and Network said "We are using FingerTec attendance system since 5 years ago. Terminals were good but we always facing problems with the application." They have been looking for a solution that is convenient, centralized, affordable and scalable to manage the growing workforce in their organization.

TimeTec TA became the obvious solution because it is available on cloud platform and it can work perfectly with FingerTec biometrics solutions. In addition, TimeTec TA system is available in Arabic making it a perfect fit for Emiratis. "TimeTec TA solved all our issues of attendance and helped human resources management tremendously," said Mr Rashid. Currently, TimeTec TA is connected to all the FingerTec terminals around Dubai, easing the access of attendance records for the department managers any place any time. There are only a handful of employees using TimeTec Mobile due to the nature of their work. The ability of TimeTec TA to provide the organization with a customized report solution is another key reason why Dar Al Ber Society was attracted to the solution. "Now the reporting has become much easier with TimeTec TA as the data is centralized. The management also preferred to be notified of any devices that are not connected to the system or out of service. Fortunately, TimeTec TA was designed to report such incidents in real-time. Managing leaves remain a concern and we were informed that TimeTec is developing the leave solution as we speak," he stressed.

As part of TimeTec's Corporate Social Responsibility, TimeTec Computing is giving licenses free of charge to any NGOs around the world. Dar Al Bar Society is officially TimeTec's first recipient of this CSR effort to date. "I appreciate the work of marketing and support team of TimeTec especially Mrs Tamy Phoon that has provided us with assistance and for the company that has provided us with this complimentary solution. This is definitely a great initiative for Corporate Social Responsibility," ended Mr Shahjahan. 🙏





# TimeTec TA and FingerTec Biometrics Team Up to Reinforce UIS's Workforce Management

United Insurance Services, Indonesia (UIS) is an independent insurance broker that specializes in traditional marine and energy insurance policies. They also offer expertise in other types of insurance schemes available in the market. Being in this industry, the nature of its workforce is mobile, and when mobility is concerned, having some kind of control of the employees is crucial. Hence, UIS consulted PT Retailindo Technology, FingerTec's authorized distributor in Indonesia of more than 10 years on the best system to deploy. Retailindo recommended UIS to use TimeTec TA together with FingerTec biometrics terminals for a combination of fully automated and Cloud-Based Time Attendance System.



According to Mr Rudy Hartono, the Human Resource and General Affair Officer of UIS, they are adjusting well to the new system. He said, "Upon the implementation, our employees are more independent as they are able to monitor attendance details and keep track with it through a personal access ID. Overall TimeTec TA has been a great solution to help us manage our human resource in an efficient and well-organized manner."

By adapting TimeTec TA, UIS's HR team, managers and supervisors can now view and update all staff attendance information immediately through one centralized medium. The solution simplifies and cuts workload for the HR administrators who are involved in payroll affairs. TimeTec TA also provides means to safeguard workforce management proceedings to ensure UIS complies with the obligatory labor laws, especially on employee work hours and overtime affairs to avoid any legal squabbles.

Meanwhile, the employees are pleased with the system that allows them to view and record attendance online via TimeTec TA any time, anywhere. Further fa-

cilitating convenience, is the TimeTec TA Mobile app. TimeTec TA App makes it flexible for the clock in/clock out process particularly for insurance agents since the nature of their job regularly requires client visitations outside the office. The reporting process was tremendously simplified with the mobile app. Attendance is recorded using mobile phones that are successfully paired with TimeTec TA App. Geolocation tags enabled by the app indicate actual whereabouts of agents, thus establishing greater accountability amongst them.

FingerTec biometrics terminals prevent buddy punching and other forms of dishonest conducts because the system requires users to only use fingerprint to report attendance.

In the long run UIS hopes that this new system implementation can drive strong compliance towards the company attendance regulations and eventually evolve into a culture where all employees are self-disciplined. 🍎






## Butter Dispenser Ilotec Selects TimeTec TA to Control Attendance

Recently, Secces GmbH secured an interesting client for TimeTec TA. Ilotec GmbH & CO. KG is a developer and producer of a patented butter dispenser at the right temperature for the hotel sector.

Ilotec is attracted to TimeTec TA, because this application provides them with the time attendance management they need for their business. Pair TimeTec TA with TA100C, a device with fingerprint biometric verification and TimeTec Mobile for mobile verification, TimeTec TA presents possibility they cannot resist.

With TimeTec TA connected to the TA100C, it is easy to register the fingerprint credentials of all staff in the office and in their production department at the headquarters in Kassel, Germany. Upon implementation of TimeTec system, no one can ask their buddy to clock-in for them any longer. Thus, alleviating the worry of buddy-punching incidents entirely. Most importantly, TimeTec TA is cloud-based, making it accessible for authorized personnel anytime, anywhere.

The subscription of TimeTec TA entitles them to use TimeTec App for verifying attendance of their travelling sales personnel conducting customer visitations. The geo-location feature in TimeTec TA allows the management to control the staff's clock-in hours according to the predetermined tour plans. Various settings and timetables available in TimeTec TA have made it easier for them to configure the schedules for each of the different department with different needs.

In addition to the standard package of TimeTec TA application and FingerTec biometrics terminals, Secces GmbH also offers additional paid services for the complete setup of all the company settings according to the required specifications. Secces GmbH understands their specific requirements, customized settings and schedules, therefore, enabling business to run smoothly without hiccups in solution implementation. ☺

## FingerTec TA500 is a Wholesome Solution to Amul Dairy Co-operative Milk Producers' Union



Aging over six decades, Amul dairy Co-operative Milk Producers' Union (Amul) has crossed a long journey to arrive as one of India's renowned milk producers. Attributing their achievements to the humble farmers of India, the company firmly believes that true development of an organization or nation lies in the development of its people. On that note, effective human resource management on all levels of the labor force within the company cannot be never taken lightly.

Operating at its best, Amul was looking forward to establish an all rounded system to operate its biggest asset, its team. To ensure that employees are not mismanaged and at the same time uphold transparency and accountability within the organization; Amul consulted Orange Technolab (P) LTD. Upon consultation, Amul was convinced to give TA500 a try. Concerning the direction taken, time attendance management became a top priority for Amul. TA500 proved to be an effective solution and an affordable deal for the company.

The newly implemented system performed well capturing executives attendance. Loopholes, time mismanagement, and late arrivals was also recorded by the system, effectively regularizing daily attendance of employees.

Within a month of trial period Amul was very pleased with TA500's performance, convenience and accuracy. HR affairs were simplified tremendously as clock-in, clock-out records became neat, precise and reliable. Many previous issues and hurdles were curtailed and the management team today operates smoothly overseeing workers on all levels and categories with different shifts and work locations.

With the recent adaptation of TA500, Amul is now able to pin down late clock-ins and clock-outs. With this information, the payroll department is able to reward employees accordingly and curb unwanted wastage. The TA500 system cultivated a work-culture with good discipline, independence and accountability amongst the employees.

TA500 served as an effective and affordable solution. The features are comprehensive and dynamic with its biometrics, and RFID Card verification capability to save up to 2000 fingerprints and 80000 transaction logs. With the affordable pouched package, TA500's attributes does not come at a compromise; It is built and integrated with only high quality materials, paired with a user friendly software & design, backed by a dependable technical support ensuring a great user experience.

Amul is very happy with the results. They continue to further development of their team ensuring high level accountability and efficiency its workforce. ☺





FingerTec Goes Global

CYPRUS

MEGA CY



## Mega TV Cyprus Gains Control of Its Workforce with FingerTec

Mega TV is Cyprus's first private television channel that is dedicated to providing the nation with Greek & Cyprus, kids, foreign and church oriented programs. Managing workforce in a media company is not an easy task due to the flexible nature of the industry and its workforce. Accordingly, they were looking for a system that can record employee attendance and control access to their station's building located in the capital city, Nicosia.

FutureSys, FingerTec's local reseller since 2014 introduced Mega TV to FingerTec's bestseller R2. R2 has two functions; Door access security control and Time attendance management. The use of fingerprint biometrics in R2 makes things easy for workers that are constantly on the go because they do not need to carry tokens of their identity when moving in and out of the office. Fingerprint provides the company with accurate data because buddy punching is not possible with biometrics system.

"Mega TV was very enthusiastic about the whole idea of this system and how the system works. R2 is exactly the system that they needed," said Mr Stelios Stylianou, FutureSys Customer Service Manager. For the first stage of the installation, Mega TV installed R2 at the main entrance, the exit and a few more in various rooms with restricted access. "They are looking to install more units in the next phase, covering more rooms with access limited to only a few staff. We are very excited to know that our solution satisfies customer's requirements and that it meets our expectation perfectly" Mr Stylianou reiterated.

All FingerTec devices are bundled with the management software, Ingress is offered on MySQL and MSAccess databases. Ingress offers work schedule settings, access monitoring, and 30 report types, the data can be exported in various formats for user convenience. The installation of R2 at Mega TV Cyprus was completed in July 2016 and they are looking forward to cover the entire station soon with additional devices from FingerTec. 📍



FingerTec Goes Global

SAUDI ARABIA



## Arif Group Tackles Its Workforce Management with TA500R

Always seeking perfection and precision, Arif Group has excelled at the art of jewelry designing, transforming every inspiration into a unique masterpiece. With one beautiful design after another it evolved to become the largest gold and jewelry designer, manufacturer and distributor in the Kingdom of Saudi Arabia, KSA.

Being at peak of expansion and success Arif Group had to establish a reliable and standardized workforce management throughout its many branches. That goal brought the management to consult Quality of Connectivity, FingerTec's trusted distributor in Jeddah, Saudi and had later on made a decision to deploy with FingerTec's fingerprint and card model TA500R and the complementary software TCMS V2.

Both FingerTec TA500R and TCMS V2 worked cohesively to take good care of Arif Group's workforce management. The employees' time and efforts were put together for a far more progressive outcome. TA500R caught the eye of Arif Group because of its simplistic yet compatible features that fitted impeccably with the management's requirement.

TA500R has versatile and secured verification means, sturdy exterior and it comes small in size with a large storage capacity to save up to 2000 fingerprints and 80000 transaction logs. With these attributes TA500R played as a solid solution to stabilize the overall HR management process especially concerning time attendance and discipline. All employees were bound to comply with the new system where they were more aware of the bottom-line consequences of loose behaviours and other forms of crookedness like time theft, unpunctuality and etc.

Arif Group also expressed that the aftermath service from FingerTec's diligent reseller Quality of Connectivity, KSA has been pleasant and of satisfaction. The employees on the hands are adjusting well with TA500R's friendliness and for the management team, especial for HR affairs; the new implementation has brought about immense briefness in their daily executions especially during payroll times. Less paperwork and precise attendance recording and processing, along with the independent and honest working culture cultivated, Arif Group is positive that in the long run it will enhance credibility of its workforce in line with its corporate vision. 📍



# MARDI Sabah Tightens Its Security with FingerTec Biometrics

Malaysian Agricultural Research and Development Institute, MARDI is a statutory body which has been mandated to conduct research in agriculture, food and agro-based industries in Malaysia.

MARDI's Lab in Sabah is a branch of the Ministry of Agriculture and Agro-based Industry (MOA), Malaysia; a facility dedicated to R&D efforts revolving around agriculture, agritourism, livestock, food security and etc. With their on-going research, MARDI manages many important materials and documents. Hence, they require a reliable security system to ensure that only people with required clearance are allowed within the building particularly at sensitive areas.

AMTC System Sdn Bhd. FingerTec's esteemed reseller of more than 10 years in Sabah had proposed MARDI Lab to install FingerTec biometrics solution for a tight security measure. MARDI adapts FingerTec's latest fingerprint access control model R3 in combination with R2c for entries and exits of their offices and lab facilities. By having biometrics access control on both entry and exit points, the premises are secured from unauthorised personnels. Fingerprint is unique to each individual, when access authorization requires fingerprint, it tackles long standing problem of access authorization abuse in traditional security systems using access cards; Access cards posed the problem of illicit sharing and duplication by employees. With FingerTec, however, access activity at the devices will be recorded in the management software, Ingress. MARDI can operate with confidence that it's important materials and documents will be out of reach from unauthorized personnels.

FingerTec biometrics solution such as R3 utilizes fingerprint-matching technology that compares live fingerprint minutiae points with the recorded minutiae points via high tech algorithm. Studies proven that no two fingerprints are similar, and FingerTec machines have very low and negligible FRR (False Rejection Rate) and FAR (False Acceptance Rate), providing users with a very reliable solution for door access control.

Overall, MARDI is pleased with this cost savvy package that offers complete biometrics coverage plus its complimentary processing software Ingress. Data that has been captured and stored through FingerTec R3 is centralized in Ingress, which enables MARDI to not only collect but also manage, import/export data easily. This is another successful FingerTec installation for AMTC System in the land below the wind. 





# Zalatimo Sweets Regulates Its Workforce's Time with TA100C

The Zalatimo family has created extraordinary pastries and gourmet desserts from natural ingredients since 1860. Zalatimo Sweets continues this tradition till date, as an international supplier of Baklava and other gourmet Mediterranean Sweets, La Mirabelle French Pastries, Lausanne Swiss Chocolates and other delights. Many products are available online, which are carefully packed in special tins to preserve the flavour and freshness to survive the shipping journey.



In initiation of a small business, the founder Mohammad Zalatimo opened a small pastry shop in the old city of Jerusalem, within the ancient walls surrounding the Holy Sepulchre. The Zalatimo family has prospered a good 150 plus years expanding their secret recipes to sweet and pastry lovers around the globe. Alongside their tremendous growth the company has also broadened its workforce to sustain the business on a day-to-day basis.


Recognizing that keeping track of their employees' time and attendance can be a handful and monotonous process, the business owners decided to switch from a manual traditional card attendance recording method to a digital system with the ability to automatically track and computerize the recorded attendance.

In search of a suitable time and attendance system the business owners took up Euro Jordan Trading Co's suggestion on FingerTec's TA100C. Euro Jordan Trading Co, FingerTec's trusted distributor in Jordan had deliberately recommended TA100C due to its the intrinsic value of a comprehensive automated time and attendance system that is compatible with Zalatimo Sweet's business nature.

TA100C is a contemporary biometrics time attendance device, with precise well-ordered method of data collection. With this new implementation, Zalatimo Sweets is now able to monitor and regularize their employees' attendance and indirectly have control over the employee's time management and work productivity. This new atmosphere has also been a fine opportunity for the company to cultivate a new discipline and work habit that is beneficial in the long run.

Purchasing a package of convenience this digital system completely eliminates the manual process that tagged along their previous traditional card attendance recording method. Each of the employee's attendance in present is compiled electronically, which discards long standing human errors, dishonest manipulations, oversights and other callous encounters.

Hiccups in the initial stages was well addressed by Euro Jordan Trading co. with their best and quickest technical solutions. As a result, both the management and the employees are happy with the implementations. The business owners now have more time to set focus on strategizing their position in the global market; And their employees are happy to comply with an automated attendance system that only requires them to scan their fingerprint and presto!

In addition, the eye-catching full colour TFT screen enhances Zalatimo Sweet's ultramodern office setting. 





# Polycell

## Popped the Bubble of Fraudulent Staff with Deployment of Face ID 2

Polycell International Pty Ltd., headquartered in Brisbane, Queensland started its operation in Australia in 1992. The company is a part of a larger group Polycell global, one of the largest privately owned producers of Air Bubble foam in the world. Now Polycell is the nation's number one choice for Air Bubble cushion and foam packaging materials. Having four branches around Australia and one office in New Zealand, Polycell was looking for a solution that can better manage their workforce nationwide. Before resorting to FingerTec solutions, Polycell was having problems with their staff's attendance involving rampant buddy punching occurrences and data inaccuracies. These problems have affected the company's productivity, causing inflated costs and reduced morale of valuable employees.



With professional assistance received from BioAccSys, FingerTec's esteemed reseller in Queensland, Polycell was introduced to Face ID 2, a biometrics verification solution that provides biometrics of face and fingerprint recognition system, with conventional card and password verification to further strengthen security, and ease access control. Polycell met its Human Resource goal to improve security and access control with the versatile Face ID 2. Polycell implemented FingerTec's solution in February, earlier this year. The deployment of FingerTec biometrics helps to eradicate the possibility of one staff clocking in for another because the reporting staff must be present at the device to clock his identity. It is impossible for a colleague to clock for another staff with a fake identity when fingerprint verifica-

tion became a requirement. After 8 months of using Face ID 2, Polycell has managed to solve recurring workforce problems effectively. FingerTec solution puts a stop to data inaccuracy because all data that goes through the machines is recorded for further analysis via the bundled software TCMS V2.

Polycell installed FingerTec biometrics solutions in the head office in Brisbane, and in its branches in major cities like Melbourne, Sydney and Perth. For a company that emphasizes on supplying eco friendly products to the world, the application of FingerTec Face ID 2 system at Polycell parallel the company's objective to care for the environment, this is achieved by minimizing material footprint with biometric solutions.

BioAccSys has been supplying FingerTec products to Australia since 2006. Promising high security while providing their customers with effective solutions, BioAccSys is trusted to deliver good workforce management tools to its customers. 



Face ID 2





FingerTec R2 and R3 are installed for security and all CIPHARM employees are required to use their fingerprint to access to common areas and limited access areas in the company while FingerTec TA200 Plus is used for time attendance recording. Even though the system allows card and password access, CIPHARM preferred biometrics because it eliminates a lot of fraudulent activities such as; Buddy punching and tailgating. With FingerTec machines, employees cannot ask another colleague to clock in or out in their behalfs, as each fingerprint is unique to the individual. FingerTec system records all audit trails of activities that occur in the machines and feed them to the bundled software TCMS V2 for reporting purposes. By having an automated and effective system to manage the workforce attendance and movements, the company can focus its attention to other important areas of operation. The availability of accurate data also makes payroll processing a lot easier at the end of the month for CIPHARM. According to CIPHARM, "since the installation of FingerTec system, personnel management has been easier for them," said Mr. Akoikou Christian, WTS General Business Director.

FingerTec system is a versatile system that can be implemented in various industries and are able to match the requirements of many companies. All FingerTec products come bundled with a management software that provides accurate data, work scheduling feature, and a variety of useful reports that can be exported to third party applications. Apart from FingerTec time attendance and door access solutions, WTS also supplies and other security solutions such as alarm solutions, armored doors, cctv, and etc to Ivorians from its office located in the capital of Abidjan. 📞

# CIPHARM Ivory Coast Protects Its Premise with FingerTec

CIPHARM is a well-known pharmaceutical company in Ivory Coast, West Africa. The company was established 30 years ago with the objective to manufacture and market pharmaceutical products for local consumptions. The main effort is to benefit locals by offering better priced pharmaceutical products compared to that of the imported ones. Operating a factory, CIPHARM was searching for an affordable yet efficient way to control access to its premise securely. After consulting with La Société World Technology Service S.A.R.L. (WTS), CIPHARM decided to deploy FingerTec R2, R3 and TA200 Plus for the company.





# Work **HARD,** Play **HARDER**



We are always united in love and diversity, an Eid party was a feast for everybody!

All glamorized at the APICTA Award 2016.

We celebrate birthdays all year long.

No matter how advanced we are, we must stay true to our tradition.

For the company trip, we travelled to the land of Ho Chi Minh, braved the Cu Chi tunnel and experienced the Mekong river ride

A masquerade party brought the house down!





# Excel Systems Sdn Bhd, Malaysia Banking on the Latest Technology for HR Solutions


Excel Systems Sdn Bhd is a company established in Malaysia in 1989 with a clear mission to continuously help their clients increase their competitive advantage by delivering Human Resource solutions through the latest information technology. The company strives to ensure that their customers achieve tactical and strategic business goals by deploying technology solutions that can reduce costs, decrease cycle times, and seamlessly manage business processes throughout the enterprise. Excel Systems believes that through consistent, ethical and quality service to their customers, vendors, employees and community; They will establish long term relationships for a win-win situation.

Biometrics technology has been available in the market for more than a decade, however, only within the past five years biometrics authentication option has been firmly established as a reliable technological advancement. "Our first dealing with FingerTec as the main distributor started almost 10 years ago in 2005, at that time biometrics technology was still at its infancy," according to the CEO, Mr Jimmy Hee. Biometrics technology enables users to overcome the challenges of traditional individual authentication technologies in providing access to authorized individuals. Biometrics uses physiological or behavioral characteristics of a person for identification. "As technology advances, the market acceptance increases", he said. Excel Systems distributed FingerTec fingerprint time attendance and door access solutions as part of the office automation package offered to their customers. The increasing demands for biometric technology in both commercial and private organizations for these kinds of applications

for workforce management benefit Excel Systems tremendously because they are amongst the early adopters of the technology. "We have enjoyed the market share thus far and we foresee that the global biometrics market will increase dramatically in the next 10 years, which means it will present huge business opportunities for biometrics solutions providers like us," stressed Jimmy Hee.

After enjoying the explosive growth of biometrics, another technology was introduced to enhance organization's productivity & efficiency. Web technology provides access to business information regardless of place and time. We live and work in an information-driven world; Naturally, we have and we will continue to explore web technology for clients. Along with the web, Cloud solutions are also making their way into the market and Excel System has to respond. According to Jimmy Hee, cloud technology can be pitched as the best way for an organization to meet regulatory compliance while benefiting from

the scalability of the cloud. Cloud enables rapid deployment and provisioning of IT infrastructure to meet day-to-day computing requirements encompassing rapid scalability and deployment to reduce cost and risks of large enterprises. Excel Systems's long association with FingerTec provides the company with an edge. When TimeTec started introducing its cloud solutions, the synergy between our companies are great. However, on the sales side it will take some time for Excel Systems to convince their market to accept the subscription model of this solution. "I don't think the market doubt the effectiveness of the (cloud) solution, nevertheless, they remain cautious on the overall cost that they have to commit."

Due to the advancements achieved by integration of various services on the hybrid cloud deployment model, more and more organizations are relying on cloud services globally. According to him, "We need to educate the market about the actual cost of cloud software as a service. If you think about the cost of infrastructure; Such as investment of servers, installation, support, maintenance, and etc; A monthly minimum subscription is a better choice in the long run." The scalability of cloud is a major plus because it allows companies to increase or reduce its usage without causing a bloated cost on the company. Since cloud solutions cost less than on-site data banks, small businesses don't need to worry about on-site maintenance requirements. Due to recent initiative by the Malaysian government to promote adoption of cloud service in government departments and across small medium enterprises (SMEs), We expect promising growths in the market for cloud adoption for the next 5 years. 



# General Automation Ltd

## Bringing Biometrics to Bangladesh

General Automation Ltd of Bangladesh strives to become a balanced organization that believes in pursuing a high standard that would differentiate itself from other companies. The Company has been working within the AIDC (Automated Information and Data Capture) industry and the supermarket industry for more than 25 years and thus they are using this opportunity to work for the Digitalization of Bangladeshi automation. For the last 25 years or more, General Automation Ltd has retained the position of the largest market shareholder in Bangladesh and represented several companies from various parts of the world. Being involved in the AIDC sector and later on joined the supermarket industry at the start of the millennium provided the company a chance to introduce international market flavors into the country. General Automation Ltd is also a socially responsible company that takes part in making society a better place to live in.


**GENERAL AUTOMATION LTD.**

Automation &amp; Communication

Since 1991

General Automation started as FingerTec brands' exclusive distributor since 2008 and they have been involved in various installations, large and small scale. One of the largest installations is for EXIM Bank Ltd involving 126 FingerTec TA100C for 121 branches nationwide. Another is The City Bank Bangladesh that installed FingerTec time attendance and door access solutions in its many branches across Bangladesh. "We are very pleased to penetrate this huge banking industry with FingerTec solutions and without the strong support from the principle, it's not an easy task to accomplish by any company," said Mr Saiful Haque Kamal, CEO. General Automation has also secured many established clients over the 8 years dealing with the FingerTec brand.

Bangladesh is going through a radical change in the infrastructure development sector that started four years ago. The demographic of economic uplift since then has involved many implementations of biometric recognition system in the country and one of the major steps to introduce biometric recognition system took place in 2016 whereby the government and a telecom company called Grameenphone Ltd, By Telenor, merged to incorporate biometric SIM card registration for all its respective users. The purpose was to identify legitimate personal information of the population for record purposes by the government. Another scope of improvement has occurred largely in the manufacturing industry. As Bangladesh was announced the second largest supplier of garments after China, a lot of changes in the compliance sector related to factories were made. One important compliance factor is that, every factory that deals with foreign buyers must incorporate biometric system at their workplace to identify equal wages opportunity. Apart from that, Bangladesh is going through a 2021 Vision where the government wants to achieve certain developments, which include building a monorail system, improving its ticketing, and banking system, all at once. Their objective is to incorporate ticketing through biometric system, which will be adjusted from the individual's respective bank account given that all solutions are interlinked with supportive tools. All of these developments have contributed to the increase in demand of biometrics solutions coming from all over the nation.

General Automation Ltd is a trading house, a trendsetter, an efficient service provider, and a system integrator, and with the friendship it offers to its customers for 25 long years, the Company has strategized on its future plan. "We want to be the market leader in the field of biometric recognition in all aspects of Bangladesh business," stressed Saiful. "And we have specific plans going forward. Incorporation of cloud-based solutions for security, introduction of biometrics surveillance and establishment of seven modules ERP are some of the plans we have in the pipeline", he said.

On cloud solutions, the concept is still fairly new in the IT world of Bangladesh, where consumers are starting to discover the benefits of cloud. However, government funding and development support are necessary for the technology to seep into the market and gain market acceptance. "We understand the benefits of cloud solutions. It's undoubtedly cost savings, as it is scalable. The system is reliable with data on cloud server, less maintenance is needed and it has a strategic edge where companies do not need to worry about the technology, instead they can focus on their business matters", agreed Saiful. "With the above factors given, I would like to conclude by saying, Bangladesh is reaching towards the era of cloud computing. Manufacturing industries and the banking industry are switching towards cloud computing due to huge overhead costs. Government born premises are also recognizing the existence of cloud-based software and its potential to reach maximum productivity, one of the greatest conveniences in the 21st century. The correlation between population and businesses offer a great demand of cloud computing in the market of Bangladesh", he added. 

# AIS Technology Malta

## Pioneering the Latest Technology

AIS Technology was the first company in Malta to introduce biometric authentication technology to the local market since its establishment 25 years ago. The mission of the company has always been to be the forerunner, the forward thinker, the go-to company for anything biometrics and security. Since then, AIS Technology has been actively and aggressively promoting and distributing biometric solutions nationwide to the SMEs. Together with their corporate clients, AIS sees the value in the latest technology and continue to embrace it going forward.


Over many years, AIS Technology has extended their portfolio to include fingerprint and face recognition in office automation, workforce and security sectors. Due to their status as a pioneer biometrics supplier, AIS Technology clients do not see the company as just another reseller but as a company that they can consult with when it comes to the latest technology in biometrics and security.

"Biometrics technology in Malta has gained its momentum lately compared to a few years back because various industries have begun to realize the benefits of this technology in the workforce and security sectors," according to Mr Darryl Schembri of AIS. "Many people want to move from manual to automation and biometrics like FingerTec provides them the smooth transition. Employees do not need to carry any cards or tokens and all data is kept secure in the software for future analysis. There's no need for manual key in of data and calculation," he added. AIS Technology has successfully installed FingerTec in various sites particularly with door access solutions.

Not just biometrics technology, AIS Technology is also a TimeTec partner in Malta. They understand the uprising of cloud technology and having TimeTec being offered as Software as a Service, once again AIS Technology emerged as the first company to push the latest technology to the market. "We are harping on the benefits of cloud solutions to our old and new clients. Apart from the obvious cost-savings benefits attached to cloud comput-

ing, having all the data accessible with you wherever you go, at any time you need it is indeed THE winning point for cloud," said Darryl. The market starts to respond positively to the cloud solution and see it as a tool that can improve the company's entire operations. They have successfully subscribed clients with TimeTec TA to tackle the time attendance and scheduling matter of human resources in everyday operation. "We did experience teething problems but overall, I must say that the TimeTec TA solution works much better than the Windows-based software," Darryl explained.

The aim of AIS Technology is to deliver innovative solutions to their clients and to maintain their position as the leader in workforce management and security systems in the Malta market. "There are various challenges we need to face and overcome as a company to maintain our position in the market, yet we see that as an opportunity to be a stronger and better company."

AIS Technology sees the great synergy between their mission and TimeTec solutions and they are eagerly waiting for improvements and developments being made to satisfy their market needs. 







# Secces GmBH, Germany

## Pushing Biometrics & Cloud Solutions to SMEs

Secces GmbH is a private company established in 2013 in Dresden, Germany. Its main objective is to provide feasible workforce solutions that can ease daily operations of SMEs in the country. The Company provides consultative advice to small and medium enterprises that are looking into process automation with the use of new technologies. "Secces believes in the power of SMEs and if the Company can supply the best technologies to better this segment of the market, they are doing the Country a great service because SMEs are the backbone of the country's economy", according to Mr Marco Rüdric, General Manager of Secces GmbH.

The biometric industry in Germany started to gain traction only a few years back; At the time the industry struggled as most biometrics products introduced in Germany were made up of either imported or local OEM products. The inconsistency and alarming failure rate of several biometrics products during the time, posed a huge challenge for the market to regain the trust of early adopters (customers) in Germany. "Another really important point that slows down the acceptance of biometrics is the issue of data security. The biometrics industry needs to prove to its customers that biometrics products are secure and there is no invasion of privacy or worry that the information will be misused when deploying this technology", said Marco. Despite the challenges faced by biometrics industry, Secces maintained its confidence in the technology which eventually gained a solid footing in years to come.

They are using TimeTec TA's "10 licenses for free" offer to promote this time and attendance solution as a competitive package with the main focus on smaller companies. Due to Germany's instability and spike in crime rate at the time, there was a steady growth in security companies. Marco viewed the situation as a great opportunity to promote the newly released guard patrol system, TimeTec Patrol, to his market.

More and more local big players are eager on cloud solutions. The opinion of business customers about cloud computing has changed. In 2011, only 28 % of the companies had interest in cloud computing, gradually, the number climbed to 44% in 2015. Industry experts are expecting cloud computing in Germany to reach greater heights in 2016. Secces plans to continue providing the best service to its clients with TimeTec solutions moving forward. 





# GLOBAL RESELLER PROGRAM

- Conclude Sales Fast
- Reduce Support Cost
- Get Recurring Profit



Welcome to TimeTec Global Reseller Program, a well-tailored effective program that helps resellers ride on the trend of Cloud computing and embrace a great opportunity for growth. The program is brief and straightforward with clear objectives; to conclude sales in no time, and to reduce support cost for a more profitable operation. Get all the resources you need from the 8 cloud applications, and make your involvement with TimeTec fulfilling and rewarding.

- 1 Ample free trial period** where TimeTec offers up to 90 days no-obligation free trial to prospective customers, providing them with generous amount of time to carry out feasibility study.
- 2 Each customer gets some free licenses for life**, a strategy to attract and ensure confidence in them and eventually initiate sales for you.
- 3 One reseller platform and a single sign-on medium for different TimeTec applications** for monitoring and management of your customers' accounts, statuses and you can also review your earning details all at once.
- 4 Big data analysis** is available to furnish analytical reviews in improving products and sales in your territory.

- 5 Professional looking sales and marketing materials** like presentation kits, sample proposals and etc made available at TimeTec marketing resource center that you can access online.

- 6 Strong support platform to back you up** with e-learning, webinars, technical troubleshooting tips, 24/7/365 technical support, and a lot more without additional cost to sustain your customers and eliminate support cost.

- 7 Wide multilingual availability** that includes English, Arabic, Chinese, Indonesian, Japanese, Spanish and many more to cater to different language preferences around the world.

- 8 Auto-matchmaking platform** designed to connect you with the prospective customers in your region.

- 9 Auto-mailer system** that can assist you in following up your sales and reduce the cost of sales.



## Added Advantages

- Zero investments
- Income generating even when you're asleep
- 30 - 50% and life long profit sharing
- Recurring subscription sales
- Prepayment terms & absence of bad debt
- Easy to support

## Suitable Program Applicants

- IT companies
- Workforce management system providers
- Security products vendors
- Individual agents who want extra money

## How to Become a TimeTec Reseller?

- Visit [www.timeteccloud.com](http://www.timeteccloud.com), choose one or more cloud applications that you're interested in. Fill up the online partner program form and submit
- Create user account and sign up with a webinar training to get familiar with the solutions
- Visit and tap on our Marketing Resource Center to help you in sales and marketing
- Start your cloud business and enjoy the benefits of TimeTec Global Reseller Program



# The Art of Selling Cloud

By Norana Johar



Norana Johar,  
Group Chief Operating Officer,  
FingerTec HQ

*Sales are contingent upon the attitude of the salesman - not the attitude of the prospect,* William Clement Stone. When we started selling

biometrics solutions more than 10 years ago, we glorified Internet marketing to market our solutions globally without incurring exorbitant marketing costs for the activities. Marketing biometrics solution this way has been proven successful, putting us on the global map at par with other renowned brands of the industry. Now, selling cloud solutions poses us with another challenge of how to push these software products to the market effectively and sustain those customers for the longest time.

Who would be (*most likely to be*) using our cloud solutions? Do we anticipate small medium enterprises to start deploying cloud or MNCs would be the better potentials to take the bait? Identification of the right customers is paramount to determine how we focus and channel our resources to the target group. From our limited experience in the cloud business, the consumption of cloud is focused on companies around 100-3000 employees having multiple branches that require automation in attendance and a system that can handle staff mobility effectively. Knowing exactly what the right customers want, the tailoring of the marketing activities can be focused and carried out suitably.

So what do they want, and how to identify the requirements? Selling cloud, unlike regular software, shouldn't be tailored to each customer's whims and fancies on customizations. However, it doesn't mean that things get simpler, as the challenge would be to determine features that are beneficial to majority custom-

ers. For TimeTec TA for example, the appeal is the accessibility, connectivity, scalability and ease of use, definitely. And with ample great features in the solution such as scheduling and roster management, the price USD2 per user per month justifies the investment. Selling cloud is consultative; where a salesperson should spend time with a customer to understand problems they are having and advising solutions from the software that can solve those problems effectively. While doing that, perhaps the salesperson can also identify some other problems that do not have the solutions yet in the product, but could be developed in the next upgrade for the purpose of customer retention. In short, with cloud solutions, the progress never stops.

Cost of customer acquisition is getting higher as we speak and it's only wise to tap on the existing customers to cross sell and upsell our cloud solutions. TimeTec itself comprises of 8 cloud solutions; 5 of which covers workforce management with TimeTec TA, Tim-

eTec Hire, TimeTec Leave, TimeTec VMS, and TimeTec Mobile Workforce; And 3 for security industry with i-Neighbour, EpiCamera and TimeTec Patrol. There is a high chance that if the customer is pleased with TimeTec TA, they are going to move on to another solution that could ease the workload for example, TimeTec Leave. Cross selling solutions to a client does not only cut the cost of customer acquisition but it also creates customer loyalty that goes a long way for a cloud brand.

TimeTec is at the beginning of this journey and we are taking careful steps when walking on cloud business. We believe strongly that our solutions could make the working world a better place, and the only direction we have to go is up with TimeTec. With the support of all our global customers and resellers that have been with us all these years, we are confident that we could. Perhaps, we have not mastered the art of selling Cloud yet but with enough knowledge and practice, we are confident we'll get there. ☺



# TimeTec Cloud

## The Trend & The Outlook.

The exploration continues..

By Daryl Choo



**Daryl Choo,**  
Chief Technology Officer  
FingerTec R & D Center Cyberjaya

The IT trends keep evolving year in, year out. From the business aspect of it, there are no apparent changes but naturally, everybody needs to be prepared to compete with the other market players. At TimeTec, we don't compete locally. Instead, our solutions are being used by global consumers, providing us the edge to learn at the international level and develop the solutions based on the entire global IT evolvement. It is crucial for TimeTec as one of the top players in Time Attendance and Access control cloud solutions to identify the current and future IT trends moving forward.





From our statistics, TimeTec solutions managed to secure around 2500 subscribers in 2015 and until the third quarter of 2016, a total of 5500 subscribers are recorded, almost 120% increase and more subscriptions are underway amidst discussions and negotiations. This figure provides an obvious indication to the team on the Cloud acceptance that is gaining momentum the world over and we anticipate the trend to upscale in the next 5 years.

Back in the early 2016, we were building the entire R&D team to face the global cloud challenges and the IT transformation from on-premise to off-premise, fully managed by the cloud environment. Typical human resource solutions e.g Leave Management, Time Attendance, Payroll Solution and etc, which used to be installed at local premises, are now transformed into the Cloud environment and further facilitated by the Do-It-Yourself concept. The entire Enterprise IT no longer require complicated setup and prolong implementation period, now you could just consume the Software as a Service (SAAS) concept and start using it within a click of time. The whole idea has enabled business owners to gather more resources to focus on their core business.

Another very important aspect of the entire trend is collaboration, that plays a dominant role in the entire Cloud ecosystem. Nowadays, software solution cannot sit on its own island. Leave solution will need to integrate with Time Attendance system for the payroll generation at the end of the month, and Patrol Solution could be using some parts of the Time Attendance system to handle the everyday attendance of the staff. The complete collaborations between cloud applications provides seamless experience to the end user and helps improve user experience and increase the stickiness of your cloud offering. And this has become integral when we plan for the entire TimeTec Suite.

Cyber security and compliance are also something that cloud practitioners shouldn't have a lax attitude about. It is THE responsibility of the cloud offering vendor to ensure that all possible measures have been taken into considerations in securing the entire solution. To comply to the Enterprise Information and Security compliance, TimeTec plans to get an external party for internal audit or external certification for compliance. It would be our next milestone in 2017. It is also be in-line with our entire development as we have com-

pleted the CMMI Level 3 for our entire cloud development, now it's time to move forward to security and compliance.

Moving forward from our cloud offering, Internet of Thing (IoT) is another chapter we are looking into. Enabling our FingerTec Terminal to communicate with our cloud platform was our stepping stone into the cloud, and as we go along we foresee more devices and hardware will get plugged into our TimeTec Cloud in the future. NFC and iBeacon with the help of mobile devices have already been added into our list of new feature. Ultimately, we hope to further expand and enable end-users to manage their door access related products through our Cloud platform as well. With the 28.1 billion IoT devices projected by IDC for 2020, the entire IoT industry poses a very big opportunity for TimeTec to explore and venture into because we believe that all these connected devices will provide some meaningful information to our Cloud development, one way or another.

Big data has been a buzzword of late and we see big enterprises started to implement it to better understand customer behaviour and getting enhanced business insight. We have started our big data deployment in 2016 and in 2017, we will further strengthen the whole platform and analysis of information. More relevant information about employees' performance on dynamic dashboard will be made available for the company to plan their employee resources accordingly and evaluate the value of those employees. This big data analysis is not only available on our TA solution, but it also applies to all our TimeTec Suite in the long run.

Artificial intelligence (AI) is another big aspect that we will start working on. Leveraging on deep learning technology, we would be able to allocate some tasks to the computers for processing. We shall reveal more details about this offering in our upcoming release in 2017 for example, to help company analyze fake attendance photos. We are thrilled to showcase the solution to the public and plan to implement it on more used cases. Ultimately, we hope to utilize the same technology to assist us to automate the schedules & resource planning which is very complex in nature.

The future is very challenging for the team because we have to deal with a bunch of sophisticated and high-end latest technologies all at once. To be the frontrunner for our entire cloud journey, we encourage the concept of learning from mistakes during our software development process and grow the entire team to become more dynamic and capable to overcome more cloud challenges in the future. And for us, it is not a Cloud dream but it is a Cloud Journey reality taken with our entire passionate team member together. 🚀







# Mobile Apps Development 2017 Let's Get Practical!

By Barry Chai



Barry Chai,  
Chief Operating Officer,  
TimeTec R & D Center Cyberjaya

When we hear the word "app", facebook, WeChat, Whatsapp, Instagram quickly come to mind. The general populations always associate mobile apps with consumer apps that are mainly for social purposes. In fact, there are quite a number of enterprise apps dominating the market and positioned at the top 100 downloads in AppStore and Google Play as we speak. According to Statista, in the year 2017, the number of mobile app downloads worldwide is expected to reach 268.69 billion and the total global mobile app revenue is expected to grow from \$45.37 Billion in 2015 to \$76.53 Billion in 2017, which shows that apps consumption is not slowing down by any means.





Mobile applications deployment are not limited to “technology savvy” sectors or industries, more and more businesses realize the value of having mobile applications to upscale their business and more importantly, to be used as a practical tool for their customers to engage with their brands and businesses. i-Neighbour by TimeTec for example, is a Visitor Management Solution for high-rise residential and gated guarded communities. And the mobile solution for i-Neighbour should be designed to improve the way a community handles their visitors effectively.

Certainly the global populations are taking their apps seriously and we are going to take a look on the technologies and the strategies to develop enterprise app as we go into 2017.

First and foremost is the adoption of motivational design on the user interface.


Mobile app development can no longer ignore user experience as part of the process. How to make the user-interface unobtrusive yet playful to the consumers? How to insert the wow factor and feature augmented reality in that small space? All in all, how to make this simple tool something that users like to use, will use it over and over again without much assistance and the best would be, couldn't live without. That's the UX goal for mobile app development. i-Neighbour has gone through a major revamp since the first stage of development to satisfy the UX requirements and to make sure that less or no assistance is required when using the app.

Location sensing is another important factor to consider for mobile app development because in one way or another, knowing exactly where things take place is crucial. Incorporation of GPS in i-Neigh-

bour is on the way with the inclusion of a panic button inside the app, to indicate where this button is turned on in order to deliver help.

We should be also looking into Enterprise mobility going forward, a term that means we can accomplish a lot of tasks without having to be in front of the PC or being in a premise. We can be productive while on the go. In i-Neighbour context, we incorporate enterprise mobility in the sense that consumers or tenants can manage their residential visitors and communicate with the residential management and the community through i-Neighbour mobile app. By integrating the app with the community and its lifestyle, i-Neighbour mobile app could be a solution that modern community requires.

Speaking of Internet of Things, i-Neighbour has designed an alarm system complete with a siren, strobe light and an LED display board that can be integrated with our cloud and mobile solution, alarming security guards during emergency.

At the end of the day, all solutions depend on data for analysis, and that is where Application Performance Monitoring (APM) tool involving big data come to play. It is wise for a company to invest in predictive analytics, artificial intelligence and big data, to prepare for the future. It's a long road to fully understand and capitalize on analytics and data, but it has to start somewhere. i-Neighbour will be implementing useful data analytic into the mobile app in 2017. 





# BLE I/O Device

## Promoting Wireless Access Security in the Connected World

by Henry Pang



Henry Pang,  
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Access control security has always been linked sets of hardware, installation, wiring, system deployment training and commissioning, something that is complex and requiring expert in the field to get it done. The usual practice is, the control of the sensors will be done at its own control panel and very unlikely, done remotely. But what if one could control access control through one's laptop or a smartphone? Wouldn't that be convenient? In fact, the security industry is moving to incorporate the cloud solution into access control where users can open/lock doors through their mobile device, press panic button, block unauthorized entry and many other functions. How is this possible? This article will provide an explanation on one design that involves a BLE (Bluetooth Low Energy) I/O device.





## Something blue is cooking

At TimeTec, we are designing a Bluetooth Low Energy I/O device that functions as a monitoring station for alarm sensors, which include passive infrared sensor (PIR sensor), smoke detector, motion detector and many more. Most of the sensors available in the alarm industry are either relay contact or power contact and the BLE I/O is devised to monitor outputs from these kind of sensors.

This is an example of how a BLE I/O device could work. You need to install a motion detector and pair it to a BLE I/O unit. In normal circumstances, the detector will continuously output its relay signal through its wire and simultaneously, the BLE I/O unit receives this signal constantly in real-time. However, when that detector senses movement in the monitored space, its relay signal will change and the BLE I/O unit will pick up this change in signal instantaneously and emit the status to the mainboard to activate the siren.

## The story of the BLE I/O mainboard

The mainboard has a CPU that stores configurations and alarm setup, but they are not designed to store user information or access rules for security reasons. The communication between BLE I/O and the mainboard is linked through Bluetooth (BLE 4.1) and WiFi for the Internet to link data to the cloud server. This mainboard works as a platform to connect and monitor the statuses of all the BLE I/O units connected to it.

By using a mobile app, users could access to the mainboard for rules configuration and monitoring of each BLE I/O unit. In any events where the alarm sensor that is connected to the unit reported flaws, the BLE I/O unit will direct the mainboard to trigger the alarm.

This mainboard connects to the Cloud server through the Internet where all records from each BLE I/O unit is recorded under individual account. With this remote connectivity, users can access to view and monitor his space and premises through a mobile app, remotely.

## Benefits of the BLE I/O

With this brilliant design, customers can purchase any generic brand of alarm sensor that provides either relay or power output, and pair it with an alarm system. The DIY concept of BLE I/O units gives customers an easy decision about the quantity of sensors they require for their space, without having to worry about the inflated cost of the expert installations. The configuration of this BLE I/O unit can be accomplished in mobile app for user convenience and all set ups will be stored in the cloud server securely, leaving the total control in the hands of the users.



## TimeTec Access and BLE I/O

Customers can also choose to mount FingerTec access terminals to the BLE I/O unit, and setup the mainboard to recognize it as an access control point. Therefore, users can install electronic door lock system to the mainboard to control the doors. On the control part, a system administrator needs to be assigned to configure access rules and assign users accordingly through the mobile app. Each user may access to the system through his/her own mobile app account to open and lock doors according to the authority assigned to him/her.

With this design, the wiring part of the installation can be reduced significantly, making it a sleek system, and the rules setup can be applied differently to different users, and there is also an option to connect to different devices at a time, providing control and convenience at its best to all customers. [e](#)

# Are You Cloud Ready?

## Top 10 Reasons to Shake off that Worry

by Nattalina Zainal

Cloud computing is so mainstream nowadays that many enterprises are embracing this new technology towards the new digital business era. The statistic report from RightScale, Cloud Computing Trends: 2016 State of the Cloud Survey reports that out of 1,060 IT professionals taking their survey, 95% of respondents are now in the cloud. So, is cloud the way to go? Is it really for you? The answer is a solid definite. To gauge your readiness, here are the Top 10 reasons that you should be ready to embrace cloud.



Nattalina Zainal,  
Marketing Manager,  
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## Centralized System

How often do you hear, "I couldn't access the file, I'll do it later," excuse when you want to complete important tasks at hand. Isn't it better to have an effective system that stores and centralizes all your data from one place, especially if you own a company with multiple offices in different locations. Many companies are dealing with on-premise software, whereby data is not centralized, data importation becomes tedious, a waste of time and resource. Unlike cloud system, data from all branches are accessible in real-time and can be processed efficiently.

## Automatic Updates

Software updates are so important that failure to do it on time could cause haywire in the system and database. With cloud application, you can stop worrying about installations and/or updates because the application is updated automatically and for sure, you are using the latest version every time you login, hands down amazing.

## Forget Maintenance

Don't be surprised that this is possible because in cloud environment, maintenance is the service provider's problem; leave the maintenance work to them. You can save the money you are paying for servers and application maintenance personnels.

## Scale it to Your Size

Business is volatile, one day you can be employing a lot of staff, the next you would want to trim the fat. Whatever your reason may be cloud system is flexible enough to handle your scalability without you having

to worry about investing on infrastructure and hardware. On top of that, cloud can offer large enough storage and great security for all your data.

## Predictable cost

Cloud system cuts out the high cost of purchasing hardware like servers and allows customers to enjoy a subscription-based system that is kind to the pocket. Customers only need to pay for their subscription as and when it's needed, so costing is always predictable.



## Customer Driven

Cloud systems are designed to be closer to the customers. Since the application reaches the customers directly and feedbacks are directed straight to the service provider, cloud system tends to change according to the customer's need, making it more relevant and applicable to customer.

## Bring Your Own Device

Cloud enables collaboration and link to Internet of Things (IoT). Undoubtedly, smartphones have been embedded into our lifestyle. With mobile devices becoming a necessity, BYOD concept is no longer an alien concept and cloud application such as TimeTec can offer clients with access and useful features through mobile devices for convenience.

## Cloud-ability

The beauty of cloud system is its ability to be everpresent and cross boundaries. Regardless of day or night, you can access cloud solutions

from anywhere and to get the job done. Cloud providers like Amazon provides 99.95% uptime and are always prepared for potential disasters, keeping your data safe and sound.

## Enhanced Security

Cloud service providers are committed to provide high-level security protocol to ensure data protection. As cloud services are offered to a big number of businesses, cloud service providers ensures strict security and is constantly adding more security measures in their cloud server and application. The same goes for TimeTec, where the 2-Factor Authentication method will soon be introduced, as an additional security layer to access to TimeTec.

## Fast Implementation

On-premise solutions traditionally needs installations, hardware purchasing, software setup, and maintenance to get the system up and running. With cloud system, you can get the trial version, test it and use it straightaway should the solution fits your company's need. As most cloud systems have Setup Wizard, implementation of the system will be much faster and easier compared to the on-premise software.



Cloud SaaS (Software as a Service) like TimeTec solutions offer great benefits to all kinds of businesses around the globe for obvious reasons. But to embrace cloud, many business owners are still considering whether they should make that commitment. In the world that is becoming so intimate with technology, the answer to the question "Is my business cloud-ready?" it's pretty actually, not cloudy. ☁



# Fingerprint and Card

## Access Control & Time Attendance Model

FingerTec access control devices are specifically made to manage door accessibilities at your work or home area. These access control models are able to support fingerprint, card, password, or any combination of the three methods as a means of controlling access in a secured area. All FingerTec access control and time attendance models come with a complimentary copy of the powerful *Ingress* software to implement a more advanced access control system. *Ingress* can also be substituted with the *TCMS V3* software for customers that mainly require time attendance functions.



### SPECIFICATIONS

MODEL	AC900	R2	R3	R2c (Slave)	H2i	Q2i	i-Kiosk 100 Plus
SURFACE FINISHING	Acrylonitrile butadiene styrene (ABS)	Acrylonitrile butadiene styrene (ABS)	In-mould labelling (IML), poly carbonate (PC) & (ABS)	Acrylonitrile butadiene styrene (ABS)	Acrylonitrile butadiene styrene (ABS)	Acrylonitrile butadiene styrene (ABS)	Acrylonitrile butadiene styrene (ABS)
TYPE OF SCANNER	Non coated optical scanner		Non coated optical scanner		Non coated optical scanner		Non coated optical scanner
MICROPROCESSOR	400 MHz	400 MHz	400 MHz	Managed by master	300 MHz	800 MHz	600 MHz
MEMORY	128 MB flash memory & 32 MB SDRAM	128 MB flash memory & 32 MB SDRAM	128 MB flash memory & 32 MB SDRAM	Managed by master Supports	256 MB flash memory & 32 MB SDRAM	256 MB flash memory & 64 MB SDRAM	256 MB flash memory & 64 MB SDRAM
ALGORITHM	BioBridge VX 9.0 / 10.0	BioBridge VX 9.0 / 10.0	BioBridge VX 10.0	BioBridge VX 10.0	BioBridge VX 9.0 / 10.0	BioBridge VX 9.0 / 10.0	BioBridge VX 9.0 / 10.0
PUSH TECHNOLOGY	Yes	Yes	Yes	×	×	Yes	Yes
DIMENSION (L X W X H), mm	91 x 40 x 190	94 x 50 x 189	78 x 32 x 190	64 x 42 x 135	78 x 50 x 150	200 x 56 x 160	260 x 70 x 320
STORAGE							
Fingerprint templates	1500	3000	3000	Storage in master terminal	1500	10000	10000
Transactions	100000	120000	100000	Storage in master terminal	100000	200000	200000
ENROLLMENT & VERIFICATION							
Methods	Fingerprint (1:1, 1:N) & password	Fingerprint (1:1, 1:N) card & password	Fingerprint (1:1, 1:N) card & password	Fingerprint (1:N) & card	Fingerprint & card	Fingerprint (1:1, 1:N), card & password	Fingerprint (1:1, 1:N), card & password
Recommended fingerprint per user ID	2	2	2	Managed by master	2	2	2
Fingerprint placement	Any angle	Any angle	Any angle	Any angle	Any angle	Any angle	Any angle
Verification time (sec)	< 1	< 1	< 1	Managed by master	< 1	< 1	< 1
FAR (%)	< 0.0001	< 0.0001	< 0.0001	Managed by master	< 0.0001	< 0.0001	< 0.0001
FRR (%)	< 1	< 1	< 1	Managed by master	< 1	< 1	< 1
CARD TECHNOLOGY							
RFID: 64-bit, 125kHz	×	Yes	Yes	Yes	Yes	Yes	Yes
MIFARE: MF1S50/S70, 13.56MHz	×	Made to order	Made to order	Made to order	Made to order	Made to order	Made to order
HID: HID 1325, 26-bit, 125kHz	×	Made to order	×	×	Made to order	Made to order	Made to order
COMMUNICATIONS							
Method	TCP/IP, RS232, RS485	TCP/IP, RS232, RS485, USB disk	TCP/IP, RS232, RS485, USB disk	RS485	TCP/IP, RS232, RS485, USB disk	TCP/IP, RS232, RS485, USB disk (Optional WIFI & GPRS)	TCP/IP, RS232, RS485, USB disk & WiFi
Baud rates	9600~115200	9600~115200	9600~115200	×	9600~115200	9600~115200	9600~115200
Wiegand	26-bit output	26-bit input/output	26-bit input/output	×	26-bit input/output	26-bit input/output	26-bit input/output
OPERATING ENVIRONMENT							
Temperature (°C)	0 ~ 45	0 ~ 45	0 ~ 45	0 ~ 45	0 ~ 45	0 ~ 45	0 ~ 45
Humidity (%)	20 ~ 80	20 ~ 80	20 ~ 80	20 ~ 80	20 ~ 80	20 ~ 80	20 ~ 80
Power input	DC 12V 3A	DC 12V 3A	DC 12V 3A	Managed by master	DC 12V 3A	DC 12V 3A	DC 12V 3A
TIME ATTENDANCE							
Siren	×	×	×	×	×	Built-in (Optional external)	Built-in
Work codes	Yes	Yes	Yes	×	×	Yes	Yes
MULTIMEDIA							
Voice	×	×	Yes	×	Yes	Yes	Yes
Display	Black and white	Black and white	2.4" 3k color LCD	×	×	3.5" 65k color TFT screen	8.0" 65k color TFT touch screen panel
Short messaging	×	Yes	Yes	×	×	Yes	Yes
Photo-ID	×	×	Yes	×	×	Yes	Yes
Music playback	×	×	×	×	×	×	Yes
Movie playback	×	×	×	×	×	×	Yes
Internal backup battery	×	×	×	×	×	×	Yes (DC 12V 2000mAh)
ACCESS CONTROL							
EM lock driving output	DC 12V 3A / relay output	DC 12V 3A / relay output	DC 12V 3A / relay output	Managed by master	DC 12V 3A / relay output	DC 12V 3A / relay output	DC 12V 3A / relay output
Alarm output	NO	NO/NC	NO/NC	Managed by master	NO/NC	NO / NC	NO / NC
Anti passback	×	Yes	Yes	Managed by master	Yes	Yes	Yes





# Fingerprint

## Time Attendance Model

FingerTec time attendance biometric models are ideal for most companies that are looking to track, monitor, and analyze staff attendance effectively. Sturdy in design, all the models come with a complimentary copy of the comprehensive attendance software, *TCMS V3*, or it can be used with the chargeable applications, *FCC* or *TimeTecTA*, for more elaborate and extensive management features.



SPECIFICATIONS						
MODEL	TA300	TA500	TA700W	AC100C	TA100C	TA200 Plus
SURFACE FINISHING	Acrylonitrile butadiene styrene (ABS)	Acrylonitrile butadiene styrene (ABS) & Polycarbonate (PC)	Acrylonitrile butadiene styrene (ABS) & Polycarbonate (PC)	Acrylonitrile butadiene styrene (ABS)	Acrylonitrile butadiene styrene (ABS)	Acrylonitrile butadiene styrene (ABS)
TYPE OF SCANNER	Non coated optical scanner	Non coated optical scanner	Non coated optical scanner	Non coated optical scanner	Non coated optical scanner	Non coated optical scanner
MICROPROCESSOR	400 MHz	360 MHz	180 MHz	800 MHz	800 MHz	800 MHz
MEMORY	8 MB flash memory	128 MB flash memory & 16 MB SDRAM	16 MB flash memory & 8 MB SDRAM	256 MB flash memory & 128 MB SDRAM	256 MB flash memory & 128 MB SDRAM	256 MB flash memory & 32 MB SDRAM
ALGORITHM	BioBridge VX 9.0 / VX 10.0	BioBridge VX10.0	BioBridge VX10.0	BioBridge VX 9.0 / VX 10.0	BioBridge VX 9.0 / VX 10.0	BioBridge VX 9.0 / VX 10.0
PUSH TECHNOLOGY	✗	✗	Yes	Yes	Yes	Yes
DIMENSION (L X W X H), mm	160 x 120 x 127	184 x 38 x 134	166 x 14 x 122	195 x 48 x 144	190 x 52 x 140	200 x 56 x 160
STORAGE						
Fingerprint templates	1500	2000	1000	8000	8000	10000
Transactions	50000	80000	50000	200000	200000	200000
ENROLLMENT & VERIFICATION						
Methods	Fingerprint (1:1, 1:N) & password (Optional RFID Card)	Fingerprint (1:1, 1:N) & password (Optional RFID Card)	Fingerprint (1:1, 1:N) & password	Fingerprint (1:1, 1:N) & password	Fingerprint (1:1, 1:N) & password (Optional RFID Card)	Fingerprint (1:1, 1:N) card & password
Recommended fingerprint per user ID	2	2 (Max 1000 user ID)	2 (Max 500 user ID)	2	2	2
Fingerprint placement	Any angle	Any angle	Any angle	Any angle	Any angle	Any angle
Verification time (sec)	< 1	< 1	< 1	< 1	< 1	< 1
FAR (%)	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
FRR (%)	< 1	< 1	< 1	< 1	< 1	< 1
CARD TECHNOLOGY						
RFID: 64-bit, 125kHz	Made to order	Made to order	✗	✗	Made to order	Yes
MIFARE: MF1S50/S70, 13.56MHz	Made to order	Made to order	✗	✗	Made to order	Made to order
HID: HID 1325, 26-bit, 125kHz	Made to order	✗	✗	✗	Made to order	Made to order
COMMUNICATIONS						
Method	USB client	TCP/IP, USB disk	WiFi, USB disk	TCP/IP, USB disk (Optional RS232 & RS485)	TCP/IP, USB disk (Optional RS232, RS485, WiFi & GPRS)	TCP/IP, USB disk (Optional RS232, RS485, POE, WiFi & GPRS, to non-POE devices)
Baud rates	✗	✗	✗	9600~115200	9600~115200	9600~115200
OPERATING ENVIRONMENT						
Temperature (°C)	0 ~ 45	0 ~ 45	0 ~ 45	0 ~ 45	0 ~ 45	0 ~ 45
Humidity (%)	20 ~ 80	20 ~ 80	20 ~ 80	20 ~ 80	20 ~ 80	20 ~ 80
Power input	DC 5V 800mA	DC12V 1.5A	DC5V 0.8A	DC 5V 2A	DC 5V 2A	DC 12V 3A, DC 5V 2A (POE)
TIME ATTENDANCE						
Siren	✗	Yes	Yes	✗	Built-in and external	Built-in (Optional External)
Work codes	✗	Yes	Yes	Yes	Yes	Yes
MULTIMEDIA						
Voice	Yes	Yes	Yes	Yes	Yes	Yes
Display	Black and white	2.8" 3k color TFT screen	2.8" 65k color TFT screen	3.0" 65k color TFT screen	3.0" 65k color TFT screen	3.5" 65k color TFT screen
Photo-ID	✗	Yes	Yes	Yes	Yes	Yes
Short messaging	✗	✗	✗	Yes	Yes	Yes
Music playback	✗	✗	✗	✗	✗	✗
Movie playback	✗	✗	✗	✗	✗	✗
Internal backup battery	Yes (DC5V 1300mAh)	Yes (2-hours working, 4-hours standby)	✗	✗	✗	✗



# Face Recognition

## Access Control & Time Attendance Model

FingerTec advanced face recognition technology offers a contactless mode of verification for time attendance and door access control with optional card technology as well. Scan a face to get accurate verification in split seconds. FingerTec access control and time attendance models come with a complimentary copy of the advanced access control software, *Ingress*, which can be substituted with *TCMS V3* software for customers that mainly require time attendance functions. Suitable for application in areas such as hospitals, labs, workshops, etc.



### SPECIFICATIONS

MODEL	Face ID 2	Face ID 3	Face ID 4	Face ID 4d
SURFACE FINISHING	Acrylonitrile butadiene styrene (ABS) & acrylic	Acrylonitrile butadiene styrene (ABS) & acrylic	Acrylonitrile butadiene styrene/ polycarbonate blend	Acrylonitrile butadiene styrene/ polycarbonate blend
TYPE OF SCANNER	Hi-res infrared camera & fingerprint scanner	High resolution infrared camera	High resolution infrared camera	High resolution infrared camera
MICROPROCESSOR	800 MHz	800 MHz	800 MHz	800 MHz
MEMORY	256 MB flash memory & 128 MB SDRAM	256 MB flash memory & 128 MB SDRAM	256 MB flash memory & 128 MB SDRAM	256 MB flash memory & 128 MB SDRAM
ALGORITHM	Face BioBridge VX 8.0, FP BioBridge VX9.0/10.0	Face BioBridge VX 8.0	Face BioBridge VX 8.0	Face BioBridge VX 8.0
PUSH TECHNOLOGY	Yes	Yes	Yes	Yes
DIMENSION (L X W X H), mm	207 x 120 x 145	86 x 62 x 218	148 x 148 x 122	148 x 148 x 122
STORAGE				
Fingerprint templates	10000	×	×	×
Face templates	1200	1500	800	800
Cards	10000	10000	10000	10000
Transaction logs	200000	100000	100000	100000
ENROLLMENT & VERIFICATION				
Methods	Face (1:1, 1:N), fingerprint (1:1, 1:N), card & password	Face (1:1, 1:N), card & password	Face (1:1, 1:N), card & password	Face (1:1, 1:N), card & password
Recommended fingerprint per user ID	2	×	×	×
Fingerprint placement	Any angle	×	×	×
Verification time – Fingerprint, sec	< 1	×	×	×
Verification time – Face, sec	< 2	< 2	< 2	< 2
Fingerprint	FAR < 0.0001%, FRR < 0.1%	×	×	×
Face	FAR < 0.01%, FRR < 0.1%	FAR < 0.01%, FRR < 0.1%	FAR < 0.01%, FRR < 0.1%	FAR < 0.01%, FRR < 0.1%
CARD TECHNOLOGY				
RFID: 64-bit, 125kHz	Yes	Yes	Yes	Yes
MIFARE: MIFIS50/S70, 13.56MHz	Made to order	Made to order	Made to order	Made to order
HID: HID 1325, 26-bit, 125kHz	Made to order	Made to order	×	×
COMMUNICATIONS				
Method	TCP/IP, RS232, RS485, USB disk (Optional WIFI & GPRS)	TCP/IP, RS232, RS485, USB disk (Optional WIFI)	TCP/IP, USB disk, USB client (Optional WIFI)	TCP/IP, USB disk, USB client (Optional WIFI)
Baud rates	9600 ~ 115200	9600 ~ 115200	9600 ~ 115200	9600 ~ 115200
Wiegand	26-bit output	26-bit input/output	×	×
OPERATING ENVIRONMENT				
Temperature (°C)	0 ~ 45	0 ~ 45	0 ~ 45	0 ~ 45
Humidity (%)	20 ~ 80	20 ~ 80	20 ~ 80	20 ~ 80
Power input	DC12V 3A	DC12V 3A	DC12V 3A	DC12V 3A
TIME ATTENDANCE				
Siren	Built-in (Optional external)	Built-in (Optional external)	Built-in	Built-in (Optional external)
Work Codes	Yes	Yes	Yes	Yes
Fast transaction checking	Yes	Yes	Yes	Yes
MULTIMEDIA				
Greeting voice	Yes	Yes	Yes	Yes
Display	4.3" 65K color TFT touch screen panel	3.0" 65K color TFT touch screen panel	3.0" 65K color TFT touch screen panel	3.0" 65K color TFT touch screen panel
Photo-ID	Yes	Yes	Yes	Yes
Short messaging	Yes	×	Yes	Yes
Day Light Saving Timer	Yes	Yes	Yes	Yes
Internal Backup Battery	Yes (DC12V, 2000mAh)	×	×	×
ACCESS CONTROL				
EM lock driving output	DC12V / relay output	DC12V / relay output	×	DC12V / relay output
Alarm output	NO / NC	NO	×	NO / NC
Antipassback	×	×	×	×





## RFID Card

### Access Control & Time Attendance Model

FingerTec card technology models are suitable for companies that prefer to use practical, convenient tokens during verification to track, monitor and analyze staff attendance. RFID is the default technology employed, however, Mifare and HID card technologies are also available upon request. Mix and match between the master and slave models for a cost effective IN-OUT access control solution. FingerTec door access master models come with a complimentary copy of the advanced door access software, *Ingress*, and the TimeLine 100 model comes with TCMS V3 software.

SPECIFICATIONS					
MODEL	TimeLine 100	Kadex	m-Kadex	i-Kadex (Slave)	k-Kadex (Slave)
SURFACE FINISHING	Acrylonitrile butadiene styrene (ABS)	Acrylonitrile butadiene styrene (ABS)	Polycarbonate	Polycarbonate	Acrylonitrile butadiene styrene (ABS)
MICROPROCESSOR	400 MHz	400 MHz	400 MHz	Managed by master	Managed by master
MEMORY	8 MB flash memory & 32 MB SDRAM	8 MB flash memory & 32 MB SDRAM	4 MB flash memory & 32 MB SDRAM	Managed by master	Managed by master
ALGORITHM	×	×	×	×	×
PUSH TECHNOLOGY	Yes	Yes	×	Managed by master	Managed by master
DIMENSION (L X W X H), mm	190 x 50 x 140	92 x 49 x 137	92 x 29 x 134	55 x 15 x 100	75 x 20 x 115
STORAGE					
Cards	10000	30000	30000	Storage in master	Storage in master
Transactions	30000	50000	50000	Storage in master	Storage in master
ENROLLMENT & VERIFICATION					
Methods	Card & password	Card & password	Card	Card	Card & password
Card per user ID	1	1	1	Managed by master	Managed by master
Reading distance, mm	40 ~ 80 (RFID, HID), 30 ~ 50 (Mifare)	40 ~ 80 (RFID, HID), 30 ~ 50 (Mifare)	40 ~ 80 (RFID, HID), 30 ~ 50 (Mifare)	40 ~ 80 (RFID), 30 ~ 50 (Mifare)	40 ~ 80 (RFID), 30 ~ 50 (Mifare)
Verification time (sec)	< 1	< 1	< 1	Managed by master	Managed by master
CARD TECHNOLOGY					
RFID: 64-bit, 125kHz	Yes	Yes	Yes	Yes	Yes
MIFARE: MF1SS0/S70, 13.56MHz	Made to order	Made to order	Made to order	Made to order	Made to order
HID: HID 1325, 26-bit, 125kHz	Made to order	Made to order	Made to order	×	×
COMMUNICATIONS					
Method	TCP/IP, USB disk (Optional RS232 & RS485)	TCP/IP, RS232, RS485, USB disk	TCP/IP, RS232, RS485, USB disk	Wiegand	Wiegand
Baud rates	9600 ~ 115200	9600 ~ 115200	9600 ~ 115200	×	×
Wiegand	×	26-bit input / output	26-bit input / output	26-bit output	26-bit output
OPERATING ENVIRONMENT					
Temperature (°C)	0 ~ 45	0 ~ 45	0 ~ 45	-10 ~ 70	-10 ~ 70
Humidity (%)	20 ~ 80	20 ~ 80	20 ~ 80	20 ~ 80	20 ~ 80
Power input	DC 5V 2A	DC 12V 2A	DC 12V 2A	DC 12V 1A	DC 12V 1A
TIME ATTENDANCE					
Siren	Built-in and external	×	×	×	×
Work codes	Yes	Yes	×	×	×
MULTIMEDIA					
Voice	Yes	Yes	×	×	×
Display	Black and white	Black and white	×	×	×
Short messaging	Yes	Yes	×	×	×
Music playback	×	×	×	×	×
Movie playback	×	×	×	×	×
Internal backup battery	×	×	×	×	×
ACCESS CONTROL					
EM lock driving output	×	DC 12V 3A / relay output	DC 12V 3A / relay output	Managed by master	Managed by master
Alarm output	×	NO / NC	NO / NC	Managed by master	Managed by master
Anti passback	×	Yes	Yes	Managed by master	Managed by master



## Fingerprint & Card

### Simple Door Access Model

FingerTec non-communicative readers are simple plug-and-play door access terminals that require no additional software to function. Offering fingerprint, card and/or password, these independent readers are suitable for small businesses and homes.

SPECIFICATIONS		
MODEL	H3i	s-Kadex
SURFACE FINISHING	Acrylonitrile butadiene styrene (ABS)	Acrylonitrile butadiene styrene (ABS)
TYPE OF SCANNER	Non coated optical scanner	×
MICROPROCESSOR	400 MHz	400 MHz
MEMORY	32 MB flash memory	32 MB flash memory
PUSH TECHNOLOGY	×	×
ALGORITHM	BioBridge VX 10.0	×
DIMENSION (L X W X H), mm	88 x 25 x 88	88 x 25 x 88
STORAGE		
Fingerprint templates	200	×
Cards	500	500
Passwords	8 sets	8 sets
ENROLLMENT & VERIFICATION		
Methods	Fingerprint (1:N), card & password	card & password
Recommended fingerprint per user ID	1	×
Fingerprint placement	Any angle	×
Password length (digits)	Max 4	Max 4
Verification time (sec)	< 1	< 1
FAR (%)	< 0.0001	×
FRR (%)	< 1	×
CARD TECHNOLOGY		
RFID: 64-bit, 125kHz	Yes	Yes
MIFARE: MF1SS0/S70, 13.56MHz	Made to order	Made to order
HID: HID 1325, 26-bit, 125kHz	×	×
OPERATING ENVIRONMENT		
Temperature (°C)	0 ~ 45	0 ~ 45
Humidity (%)	20 ~ 80	20 ~ 80
Power input	DC 12V 3A	DC 12V 3A
ACCESS CONTROL		
EM lock driving output	DC 12V/relay output	DC 12V/relay output
Alarm output	NO only	NO only
Door sensor	Yes (NO / NC)	Yes (NO / NC)
GROUP VERIFY TYPE		
Password only	Yes	Yes
Card only	Yes	Yes
Fingerprint only	Yes	×
Fingerprint, card or password	Yes	Yes (card & password only)
Card and password	Yes	Yes
Fingerprint and password	Yes	×

Two DVDs loaded with Self-Learn Video Guides, Comprehensive Time Management Software (TCMS V3), Advanced Door Access Software (Ingress) and useful resources available with every purchase of a FingerTec terminal.

NOTE: Specifications are subject to change. Check <http://product.fingertec.com> for latest product information.



## Logical Fingerprint PC Access Model

FingerTec logical access fingerprint readers (OFIS) are designed to work with our single sign-on enterprise software application and developer's tools (SDKs) for integration with select applications. It comes complimentary with the OFIS Gateway software, providing a quicker and safer way to use fingerprints for PC login authentication. OFIS TA for attendance system is also available for purchase.



SPECIFICATIONS		
MODEL	OFIS-X	OFIS-Y
ALGORITHM	BioBridge VX 9.0 / VX 10.0	
SUPPORTING OS	32-bit Windows XP, Windows Vista, Windows 7	32/64-bit Windows XP, Windows Vista, Windows 7, Windows 8, Windows Server 2008
PIXEL RESOLUTION	512 dpi (average x, y over the scanning area)	
SCAN CAPTURE AREA, MM	17 x 26	15 x 18
SCAN DATA	8-bit grayscale (256 levels of gray)	
READER SIZE (APPROXIMATE) (L X W X H), MM	87 x 58 x 24	45 x 78 x 40
COMPATIBILITY	USB 1.0, 1.1 and 2.0 (Full speed) specifications	
OS/BROWSER	MS Windows/ MS Internet Explorer (IE 9)	
POWER SUPPLY	5.0V +/- 0.25V USB supply	
OPERATING TEMPERATURE (°C)	0 - 55	0 - 55
OPERATING HUMIDITY (%)	20 - 80 non-condensing	
STANDARD FCC CLASS	FCC Class B, CE, USB	
USAGE	Indoor, home and office use	

### FEATURES

- Small form factor
- Excellent scan quality
- Encrypted fingerprint data
- Latent print rejection
- Counterfeit finger rejection
- Rotation invariant
  - Recognize dry, moist, or rough fingerprints
  - Compatible with FingerTec's standalone readers and software products
  - Compatible with Windows XP, Windows Vista, Windows 7, Windows 8 Windows Server 2003 and Windows Server 2008

### APPLICATIONS

- Desktop computer security
- Registration station for users
- Mobile PCs
- Custom applications
- Home and office use



## Controller Security Hub for Smart Control

The FingerTec controllers, Ingressus I and II, are designed to provide access control functions for 1 and 2-door environments and Ingressus IV is designed for a 4-door environment. Ingressus can be used in combination with FingerTec slave readers and accessories for a more economical and flexible door access control solution. Each controller comes complimentary with FingerTec's advanced access control software, *Ingress*.



SPECIFICATIONS			
MODEL	Ingressus I	Ingressus II	Ingressus IV
BASIC			
Dimension (L X W X H), mm	186 x 106 x 36	186 x 106 x 36	226 x 106 x 36
Power input	12V DC	12V DC	12V DC
Operating temperature (°C)	0 - 55	0 - 55	0 - 55
Operating humidity (%)	10 - 80	10 - 80	10 - 80
CPU	32-bit, 400MHz	32-bit, 400MHz	32-bit, 400MHz
Flash memory (MB)	128	128	128
SDRAM (MB)	32	32	32
Polarity protection	Yes	Yes	Yes
STORAGE			
Fingerprints	3000	3000	3000
Cards	30000	30000	30000
Passwords	30000	30000	30000
Transactions	100000	100000	100000
COMMUNICATIONS			
Communications with server	TCP/IP, RS485	TCP/IP, RS485	TCP/IP, RS485
Quantity of terminal	2	4	4
Communication with terminals	2 x 26-bit Wiegand input. Each for 1 slave terminal (1 x RS485 input to support RS485 network) <b>(max 2 units)</b>	4 x 26-bit Wiegand input. Each for 1 slave terminal (1 x RS485 input to support RS485 network) <b>(max 4 units)</b>	4 x 26-bit Wiegand input. Each for 1 slave terminal (1 x RS485 input to support RS485 network) <b>(max 8 units)</b>
INPUT			
Push release button	1	2	4
Door sensor	1	2	4
AUX	1	2	4
Types of AUX input supported	Motion detector, passive DIR detector, curtain passive infrared detector, pet immunity PIR detector, two beam digital active infrared detector, heat detector	Motion detector, passive DIR detector, curtain passive infrared detector, pet immunity PIR detector, two beam digital active infrared detector, heat detector	Motion detector, passive DIR detector, curtain passive infrared detector, pet immunity PIR detector, two beam digital active infrared detector, heat detector
OUTPUT			
Door lock (12VDC 10A form C relay)	1	2	4
AUX output (30VDC 2A form C relay)	1	2	4
Types of AUX output supported	Gas detector and compatible sensors, Piezo strobe siren, electronic siren	Gas detector and compatible sensors, Piezo strobe siren, electronic siren	Gas detector and compatible sensors, Piezo strobe siren, electronic siren
ACCESS CONTROL FEATURES			
Main features	Door opening time (0-999s), Anti-pass back (Local only), Multi card unlocking, First card unlocking, Time zone (50), Holiday time zone, Permanent door release/lock time zone, Day light saving time zone, Continuous verification of users	Door opening time (0-999s), Inter-locking (Ingressus II & IV only), Anti-pass back (Local only), Multi card unlocking, First card unlocking, Time zone (50), Holiday time zone, Permanent door release/lock time zone, Day light saving time zone, Continuous verification of users	Door opening time (0-999s), Inter-locking (Ingressus II & IV only), Anti-pass back (Local only), Multi card unlocking, First card unlocking, Time zone (50), Holiday time zone, Permanent door release/lock time zone, Day light saving time zone, Continuous verification of users
Security features	Door force open alarm, Door open time out alarm, Fire linkage, Duress alarm, Door status and event (51 types)	Door force open alarm, Door open time out alarm, Fire linkage, Duress alarm, Door status and event (51 types)	Door force open alarm, Door open time out alarm, Fire linkage, Duress alarm, Door status and event (51 types)



# Hardware Selection Guide

FingerTec has an extensive range of biometric and card products. This guide serves as initial tool for you to compare it against your requirements and budget. Once you have decided on the models you want or if you have any further questions, email us at [info@fingertec.com](mailto:info@fingertec.com) for detailed discussions. FingerTec pledges to make things easy for you, always.

MODEL  FEATURE	METHOD				LCD DISPLAY		COMMUNICATION						FUNCTIONALITY		Bundled Software	Price Range
	Fingerprint	Face	Card	Password	Black & White	Color	RS232/ RS485	TCP/IP	WiFi/ GPRS	USB	Wiegand	Push Technology	Time Attendance	Door Access		
Fingerprint Time Attendance Model																
TA300	✓	×	A	✓	✓	×	×	×	×	✓	×	×	✓	×	TCMS V3	★
TA500	✓	×	A	✓	×	✓	×	✓	×	✓	×	×	✓	×	TCMS V3	★
AC100C	✓	×	×	✓	×	✓	A	✓	A	✓	×	✓	✓	×	TCMS V3	★★
TA100C	✓	×	×	✓	×	✓	A	✓	A	✓	×	✓	✓	×	TCMS V3	★★★
TA100C-R	✓	×	✓	✓	×	✓	A	✓	A	✓	×	✓	✓	×	TCMS V3	★★★★
TA200 PLUS	✓	×	✓	✓	×	✓	A	✓	A	✓	×	✓	✓	×	TCMS V3	★★★★
TA200 PLUS (POE)	✓	×	✓	✓	×	✓	A	✓	A WiFi only	✓	×	✓	✓	×	TCMS V3	★★★★
Fingerprint Access Control & Time Attendance Model																
AC900	✓	×	×	✓	✓	×	✓	✓	×	×	✓	×	✓	✓	Ingress	★★
R2	✓	×	✓	✓	✓	×	✓	✓	×	✓	✓	✓	✓	✓	Ingress	★★★
R3	✓	×	✓	✓	×	✓	✓	✓	×	✓	✓	✓	✓	✓	Ingress	★★★
R2c*	✓	×	✓	×	×	×	RS485 only	×	×	×	×	×	×	×	×	★
H2i	✓	×	✓	×	×	×	RS485 only	✓	×	✓	✓	×	✓	✓	Ingress	★★
Q2i	✓	×	✓	✓	×	✓	✓	✓	×	✓	✓	✓	✓	✓	Ingress	★★★★
i-Kiosk 100 Plus	✓	×	✓	✓	×	✓	✓	✓	A WiFi only	✓	✓	✓	✓	✓	Ingress	★★★★★
RFID Card Access Control & Time Attendance Model																
TimeLine 100	×	×	✓	✓	✓	×	A	✓	×	✓	×	✓	✓	×	TCMS V3	★★★
Kadex	×	×	✓	✓	✓	×	✓	✓	×	✓	✓	✓	✓	✓	Ingress	★★★
m-Kadex	×	×	✓	×	×	×	✓	✓	×	✓	✓	×	✓	✓	Ingress	★★
k-Kadex*	×	×	✓	✓	×	×	×	×	×	×	✓	×	×	×	×	★
i-Kadex*	×	×	✓	×	×	×	×	×	×	×	✓	×	×	×	×	★
Face Recognition Access Control & Time Attendance Model																
Face ID 2	✓	✓	✓	✓	✓	✓	✓	✓	A	✓	✓	✓	✓	✓	Ingress	★★★★★
Face ID 3	×	✓	✓	✓	×	✓	✓	✓	A WiFi only	✓	✓	✓	✓	✓	Ingress	★★★★
Face ID 4	×	✓	✓	✓	×	✓	×	✓	A WiFi only	✓	×	✓	✓	×	TCMS V3	★★★
Face ID 4d	×	✓	✓	✓	×	✓	×	✓	A WiFi only	✓	×	✓	✓	✓	Ingress	★★★
Fingerprint Logical Access Model																
OFIS Series	✓	×	✓	✓	×	×	×	×	×	✓	×	×	×	×	Gateway	★
Fingerprint & Card Simple Door Access Model																
H3i	✓	×	✓	✓	×	×	×	×	×	×	×	×	×	✓	×	★
s-Kadex	×	×	✓	✓	×	×	×	×	×	×	×	×	×	✓	×	★
Controller Security Hub for Smart Control																
Ingressus I	✓	×	✓	✓	×	×	RS485 only	✓	×	×	✓	×	✓	✓	Ingress	★★
Ingressus II	✓	×	✓	✓	×	×	RS485 only	✓	×	×	✓	×	✓	✓	Ingress	★★★
Ingressus IV	✓	×	✓	✓	×	×	RS485 only	✓	×	×	✓	×	✓	✓	Ingress	★★★★

# Software Selection Guide

FingerTec offers a variety of different softwares to suit the different business needs of our clients. With all the different requirements, comparing the different software functions can be a little tricky. So here's a selection guide to help you out with the details, similarities, and differences between our offered solutions.

APPLICATION FEATURE	Functionality	Database Engine	Mobile App	OS/Browser	Hardware	Total Reports	Export Format	Languages	Price
WINDOWS APPLICATION									
	Advance access control and complete time attendance	MySQL, MS Access	Android and iOS	Windows XP, Server 2003, Server 2008, Windows Vista, Windows 7, Windows 8, Windows 10	AC900, R2, R3, H2i, Q2i, i-Kiosk 100 Plus, Kadex, m-Kadex, Face ID 2/3/4d, Ingressus I/II/IV	36	CSV, TXT, XLS	Arabic, Bulgarian, Chinese (Simplified), Chinese (Traditional), English, German, Hindi, Indonesian, Kurdish, Malay, Portuguese, Russian, Spanish, Thai, Vietnamese	Bundled with hardware
	Visitor management system	MySQL	×	Safari, Google Chrome, Mozilla Firefox, Internet Explorer	AC900, R2, R3, H2i, Q2i, i-Kiosk 100 Plus, Kadex, m-Kadex, Face ID 2/3/4d, Ingressus I/II/IV	5	PDF	Arabic, Simplified Chinese, Traditional Chinese, English, Hindi, Indonesian, Malay, Portuguese, Spanish, Thai, Vietnamese	Payable
	Complete time attendance	MS Access	×	Windows XP, Server 2003, Server 2008, Windows Vista, Windows 7, Windows 8, Windows 10	TA300, TA500, AC100C, TA100C, TA200Plus, Timeline 100, Face ID 4	28	CSV, TXT, XLS	Arabic, Bulgarian, Chinese (Simplified), Chinese (Traditional), English, German, Hindi, Indonesian, Kurdish, Malay, Portuguese, Russian, Spanish, Thai, Vietnamese	Bundled with hardware
CLOUD-BASED APPLICATION									
	Cloud-based platform to consolidate and centralize the database for time attendance	MySQL	×	Safari, Google Chrome, Mozilla Firefox, Internet Explorer	AC100C, TA100C, TA200 Plus, AC900, R2, R3, Q2i, iKiosk 100 Plus, Timeline 100, Kadex, m-Kadex, Face ID 2/3/4/4d, Android phones, iPhones	×	CSV, TXT, XLS	All languages (Original + Machine translations)	Subscription
	Advance attendance	MySQL	Android and iOS	Safari, Google Chrome, Mozilla Firefox, Internet Explorer		32	CSV, TXT, XLS	All languages (Original + Machine translations)	Subscription
	Security guards and patrol management	MySQL	Android	Safari, Google Chrome, Mozilla Firefox, Internet Explorer	NFC tags and Android phones	6	CSV, TXT, XLS	All languages (Original + Machine translations)	Subscription
	HR workforce hiring	MySQL	Android and iOS	Safari, Google Chrome, Mozilla Firefox, Internet Explorer	N/A	TBA	CSV, TXT, XLS	All languages (Original + Machine translations)	Subscription
	Leave management	MySQL	Android and iOS	Safari, Google Chrome, Mozilla Firefox, Internet Explorer	Android phones and iPhones	21	CSV, TXT, XLS	All languages (Original + Machine translations)	Subscription
	Visitor registration and management	MySQL	Android and iOS	Safari, Google Chrome, Mozilla Firefox, Internet Explorer	Android phones and iPhones	TBA	CSV, TXT, XLS	All languages (Original + Machine translations)	Subscription
	Mobile workforce handling and management	MySQL	Android and iOS	Safari, Google Chrome, Mozilla Firefox, Internet Explorer	Android phones and iPhones	TBA	CSV, TXT, XLS	All languages (Original + Machine translations)	Subscription
	Cloud video surveillance	MySQL	Android and iOS	Safari, Google Chrome, Mozilla Firefox, Internet Explorer	IP cameras, Android phones and iPhones	4	JPEG	All languages (Original + Machine translations)	Subscription
	Residential and neighbourhood management	MySQL	Android and iOS	Safari, Google Chrome, Mozilla Firefox, Internet Explorer	Android phones and iPhones	10	CSV, TXT, XLS	All languages (Original + Machine translations)	Subscription
SOFTWARE DEVELOPMENT KITS (SDK)									
	To integrate FingerTec terminals to any third party system	N/A	N/A	Windows XP, Server 2003, Server 2008, Windows Vista, Windows 7, Windows 8, Windows 10	TA300, TA500, AC100C, TA100C, TA200 Plus, AC900, R2, R3, H2i, Q2i, i-Kiosk 100 Plus, Timeline 100, Kadex, m-Kadex, Face ID 2/3/4/4d	N/A	N/A	N/A	Free for registered developers
	To integrate OFIS scanners with any solutions	N/A	N/A		OFIS scanners	N/A	N/A	English	Free for registered developers
	To integrate Ingressus with any third party access control software	N/A	N/A		Ingressus I, Ingressus II, Ingressus IV	N/A	N/A	English	
	Online web based platform to consolidate and centralise the database for time attendance	MySQL	N/A	Windows XP, Server 2003, Server 2008, Windows Vista, Windows 7, Windows 8, Windows 10	AC100C, TA100C, TA200 Plus, AC900, R2, R3, H2i, Q2i, i-Kiosk 100 Plus, Timeline 100, Kadex, m-Kadex, Face ID 2/3/4/4d	N/A	N/A	Arabic, English, Malay, Simplified Chinese, Spanish	Free for registered developers
	To integrate TimeTec solution with any third party systems	N/A	N/A	Safari, Google Chrome, Mozilla Firefox, Internet Explorer	N/A	N/A	N/A	English	
SOFTWARE TOOLS									
	To manage and edit users, faces, fingerprints, logs and terminals' information	MS Access, MSSQL	N/A	Windows XP, Server 2003, Server 2008, Windows Vista, Windows 7, Windows 8, Windows 10	TA300, TA500, AC100C, TA100C, TA200 Plus, AC900, R2, R3, H2i, Q2i, i-Kiosk 100 Plus, Timeline 100, Kadex, m-Kadex, Face ID 2/3/4/4d, Ingressus I/II/IV	N/A	TXT, XLS, XML, HTML	English	Bundled with hardware
	To manage user data and fingerprint information	MS Access, MSSQL	N/A		OFIS scanners and Mifare card writer	N/A	N/A	English	Bundled with hardware
	Single sign on PC login security	N/A	N/A		OFIS scanners	N/A	N/A	English	Bundled with hardware





## 2017 Global Exhibition Schedules

Check out our latest exhibition updates at <http://info.fingertec.com/exhibitions>