

# ACTATEK FAQ

## Basics

### 1. How many fingerprint image templates can ACTATEk keep for each person?

ACTATEk stores upto a maximum of three fingerplate templates for each user.

### 2. Can the ACTATEk system support around 1000 employees each with 3 fingerprints? What is the maximum?

Yes, with 2 basic models, the Business and Corporate editions, the number of users that can be stored are 500 and 3000 respectively, each user stores upto 3 fingerprint images. The maximum for the stand-alone edition is 3000 users whereby each user can store upto 3 prints.

### 3. Can we use one unit of ACTATEk for both access control and time attendance ? If so, is there a way to separate the time attendance records from access log ( door opening) ?

Functionally, ACTATEk can be used for both access control and time attendance. However, there is no way to separate the time attendance records from access log. The best solution is to have one unit for access control and the other for time attendance. These units of ACTATEk can be networked in primary and secondary mode so that user registration does not need to be done more than once.

### 4. Can you use ACTATEk to control electronic doors?

Yes, you can connect the ACTATEk directly to an electronic door. The ACTATEk takes 12V supply from the electronic door source. Each door can be furnished with either one or two ACTATEk devices. Two ACTATEk devices are used when you need both IN/OUT control information separately.

### 5. Our staff works in shifted hours or irregular hours. How can we set the IN/OUT trigger to identify the person who is coming in or out of the office?

There are several ways to handle it: (a) Your staff can manually select IN or OUT using the "<" or ">" arrow toggle buttons on the keypad of the ACTATEk unit; (b) Set the "Auto IN/OUT" in the web interface, whereby the first transaction will be taken as IN, the second transaction as OUT, the third as IN, the fourth as OUT, and so forth. (c) Use more than one ACTATEk units to handle different shift duty. These units can be networked in primary and secondary mode so that user registration does not need to be done more than once.

### 6. How is the dynamic content in the web server displayed using static HTML pages?

We use built-in CGI language to handle the dynamic display.

### 7. Is it possible to modify the content and structure of data in the database inside the reader?

No. The content and structure can only be modified by Hectrix, not by the users.

### 8. What information does each transaction contain? What is approximate Length in bytes of each transactions stored in the reader?

User ID, Terminal ID, First name, Last name, Title, Date, Time, Department id, In/Out status.

### 9. In an access control application. Is it possible to change the access conditions dynamically?

Yes. The administrator can change the access rights of the members of each department at any time via the web browser.

#### 10. How are the updates of firmware upgraded into the reader?

The firmware can be uploaded via the web interface either to add new features or fix any existing issues with the unit.

#### 11. Are there any development kits available for system integrators? If yes, what can be done using it?

It is available from our technical department, for more information on this, e-mail [tech@hectrix.com](mailto:tech@hectrix.com)

#### 12. Does ACTAtek have any remote door controller?

The connection is simple and straight forward. You only need to connect a pair of wire from the ACTAtek to the remote door controller. And when someone is authorized, ACTAtek will send a special signal to the remote door controller to open the door.

Please note that the connection between the ACTAtek and the remote door controller is via RS485. And you cannot just short the two wires to open the door anymore.

#### 13. What OS does the ACTAtek run?

Embedded Linux.

#### 14. What intrusion detection methods are there? What happens when the chassis is opened?

There is a door sensor alarm built into the ACTAtek unit, so if anyone is found opening the unit without the proper authorization, the alarm will be triggered.

#### 15. Can the device support SNMP communications?

No, we do not support SNMP.

### FingerPrint Enrollment

#### 1. What is the figure print template size?

Max 1K bytes, average 300 bytes, depends on the fingerprint image.

#### 2. Limitation of current fingerprint recognition technologies?

1. Maximum Auto-match for 75 people because not inputting any ID is very cumbersome for the system since it needs to search the entire database to locate 1 particular fingerprint template.
2. There are bound to be workers whose fingerprint cannot be recognised due to the nature of the work causing very dry or chaffed finger.

So the best scenario is to do the following:

1. Reserve auto-match for your 20 most senior executives;
2. Others key in their id and authenticated by fingerprint OR PASSWORD; or use a smart card to gain entrance WITHOUT ANY FORM OF AUTHENTICATION during rush hour BY Just flashing the card. When they leave work, present the card which stored the fingerprint and authenticate with fingerprint OR PASSWORD. As leaving work is not as urgent as going to work in the morning.
3. If employees have unusually **dry** or **chapped** fingers, it is advisable for them to **rub their finger against their nose or use moisturizing lotion** before enrollment for better image capture.

### 3. Is the fingerprint template that is stored in the ACTAtek encrypted?

When a finger is scanned, the complete image is stored and encrypted for protection. In addition, the template is encrypted, as it can be stored on the user's local disk or smart card instead of being stored on the device. So the user's privacy is preserved.

### 4. Can ACTAtek support **dirty** fingers?

Dirty fingers are an issue for ALL biometric devices since they reduce performance. However, ACTAtek still offers various ways to overcome dirty fingers, such as:

- i. Try NOT to use the Automatch feature since that will require the person to have very high fingerprint quality during authentication. This will cause dirty fingers to be rejected since the quality of the image may be affected severely.
- ii. On the web browser, you can reduce the personal security levels for specific employees who have dirty fingers and whose images are difficult to read by the scanner.

## Primary-Secondary Mode

### 1. If an ACTAtek Primary has to be replaced, and the new ACTAtek device is set up exactly as the original, will the secondary devices replicate the employee records to that of the Primary unit?

Yes, as long as the IP is set up correctly for the new Primary unit (i.e. it has to be the same as the replaced Primary).

### 2. Referring to a primary-secondary model, do you mean the data from readers will be sent to the server automatically?

UNDER Primary-Secondary MODE, YOU CAN SEND THE DATA BACK TO YOUR CENTRAL DATABASE IN ODBC FORMAT. ALL FINGERPRINT TEMPLATES ARE STORED IN THE ACTATEK, ONCE YOU ARE REGISTERED IN ONE UNIT, THE FINGERPRINT TEMPLATE WILL BE AUTOMATICALLY COPIED TO OTHER UNITS. MAXIMUM USER IS 3,000 UNDER PRIMARY-SECONDARY MODE.

### 3. Can an ACTAtek primary unit have secondary units outside of its LAN?

Yes, the Primary and Secondary units can be installed in different subnet. However, since the Primary unit uses broadcast to sync the clock with all other secondary units, this clock sync will not work under this configuration. Other than that, there should be no difference between LAN and internet.

### 4. If an ACTAtek Primary becomes unavailable to the secondary units, what do the secondary units do? Can users still login on the secondary units?

Yes. The secondary units will temporary store all the in/out records, and once the connection with the primary unit is established again, it will send these pending in/out records to the primary unit again.

### 6. How does the primary and secondary units replicate data, users and access information between them?

The information is synchronized automatically among the units.

### 7. How often devices are connecting between them to update data information? Example new users, access log.

It is done in a real-time manner.

### 8. How do you synchronize the attendance records (IN-OUT) when there are 5-6 readers deployed in the same premises?

Set the ACTAtek in Primary/Secondary mode. After doing so, the records are synchronized automatically.

**9. We have 2 machines used for the same job we can make copy from main machine for employee database and department database from main to other but we cannot copy finger print from one machine to another?**

If you set both two machines to Primary, then the fingerprint information won't be synchronized to each other. You may use the Backup / Restore function, ie., you do a backup of the first machine, and then you restore this backup file to the other machine. Then both machines will have the same user fingerprint information.

**10. I am trying to install 2 units as primary and secondary and it has been giving some problems. On the secondary unit I'm getting the error 'Access Denied'. What do you think I'm not doing right?**

When you add yourself on to a primary unit, the unit gives you access to itself and not the other departments for security issues. To configure that, you need to go on the web server through the web browser to configure access levels.

**11. What is the initial difference between the primary and secondary? and how do they work hand in hand?**

There is no difference between the primary and secondary devices of ACTAtek, it entirely depends on the way you configure your ACTAtek units.

They are logically connected using TCP/IP protocol. With a RJ45 cable plugged from your ACTAtek unit to your corporate LAN, you can connect your ACTAtek to the corporate network. Once you have connected them, you need to configure the units' IP address for functioning, if it is a secondary unit, you have to specify its primary unit so it can relay all the information to and from the primary device.

**12. How do I change a previous primary device to a secondary device?**

This can be done by accessing your ACTAtek, and changing the system configuration from the system menu. You can change it to Primary and save the changes at any time. This will not cause any problems to your device and everything will be as it was before except that you will be able to make configuration changes, data retrieval, access log viewing from the web browser.

## Networking

**1. Is there an IN/OUT toggle for the ACTAtek?**

To set an automatic IN/OUT toggle, you need to go to the ACTAtek web interface and set it up from there. Or you can use the "<" or ">" on the ACTAtek keypad to set it manually.

**2. We are looking at installing the device on a network behind a firewall. The payroll person is in another location and would like to access the unit remotely. Is it possible to establish a port assignment in the ACTAtek, to allow access to be routed directly to the unit through the firewall?**

Yes, all ACTAtek devices are what we call Internet Appliances which means that they have an IP address. You just assign an sub-IP address to the device behind your firewall. You can then access the unit anywhere anytime in the world using a web-browser. Just type in the address as you do with www.yahoo.com.

**3. Is there encryption for the information that is send/received to ACTAtek terminal?**

Yes, ACTAtek is fully encrypted with the latest SSL technologies and all communication between the device is secure and steady.

**4. Is there a way to use a different port from port 80 that ACTAtek is at this moment using for TCP/IP connection?**

It depends on the version of ACTAtek and its respective firmware you have. The ACTAtek can support two different TCP/IP port connections other than just port 80.

#### 5. With respect to LAN interruptions how do the system works without being affected by the LAN?

The units are capable of operating in stand-alone mode, even if the LAN connection is temporarily broken. If there is a temporary disconnection, ACTAtek is capable of storing a maximum of 10,000 records on its own and once the connection is back up, the data will be automatically refreshed with your backend software.

### Time Attendance

#### 1. We have our own time and attendance software on windows OS and RDBMS database as the backend. What are the various options available to port the data available on I-guard terminals into our system?

The easier way is to use our proprietary application program. The program collects all the access log to an ODBC database. Your application can thus use this database for data analysis.

### Smart Card

#### 1. What is the data that is recorded on to the card once the card is issued to the user?

User name, User ID, company code, branch code, department code, fingerprint template x 3, user password.

#### 2. What information does each transaction contain. What is approximate Length in bytes of each transactions stored in the reader?

User ID, Terminal ID, First name, Last name, Title, Date, Time, Department ID, In/Out status.

#### 3. Please send me info, how to install (procedures) this firmware into the ACTAtek unit. I understand that first, customer must download the patch. Then, what?

It is very easy to apply the patch. Just go on the web interface of the device, and hit "Firmware Upgrade", locate the file from your system, and upgrade your device. The firmware can be made available from tech@hectrix.com

#### 4. Out of 16 sectors present on the Mifare card how many sectors are used, if the card is used to store a finger template and other data for biometric based application?

We use all the sectors.

#### 5. What is the data that is recorded on to the card once the card is issued to the user?

User name, User ID, company code, branch code, department code, fingerprint template x 3, user password.

#### 6. If the card is not used to store the finger print template. Is the memory available on the card can be used for any other third party applications?

Yes.

7. What are the built in securities features available for the card as well as the system?

The security of the card is triple DES encryption. The security of the system is handle by 1) an alarm switch for physical break-in, and 2) password.

8. How are the frequent updates of firmware upgraded into the reader?

Quarterly upgrades , as we always add new features to the system.

9. Since we are using Mifare Smart cards provided by Gemplus we would like to know whether we can use these cards?

We don't know. It depends on the Gemplus card. If they only read the serial number of the card without reading and writing the contents stored in the card, the chances are pretty good that we can use the card. Otherwise, it is almost impossible for us to use the card, since it must be protected by Gemplus's own set of security keys.

10. We are targeting the Defense sector and therefore we would like to know whether we would be having the control over the keys stored in the smart card. Certain clients require that they generate their own keys for the reader and the smart card. Do you have any tools for the same?

We have type AB version, which allows you to store your own keys in a SAM card.