

# E-Plex<sup>®</sup> FIPS System Software (Version 2) User Guide

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# 1

# About the E-Plex FIPS-201

The E-Plex 5800 door lock is designed to control entry or access to an area or premises through the presentation of either a FIPS-201 (Federal Information Processing Standard 2.01) compliant Personal Identity Verification (PIV) Smartcard ID card or a Philips DESFire Smartcard. The lock is designed to work in conjunction with the E-Plex FIPS-201 system software, with the intent to use a handheld Pocket PC or a mini Laptop (Netbook) PC to transfer information between the PC and the lock when programming or auditing the locks.

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**Note:** For the purposes of this manual, the Pocket PC and the mini Laptop (Netbook) PC will be referred to as the M-Unit (Maintenance Unit) because its primary function is to perform maintenance at the lock.

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The items explained in this chapter include the following:

- System Components
- System Definitions
- The E-Plex FIPS-201 Software (either of the two below):
  - E-Plex FIPS-General Software (no OCSP communication), or
  - E-Plex FIPS-HIGH ASSURANCE Software (communicates in real time to an OCSP server via internet to authenticate the FIPS compliant card during card enrollment)

# System Components

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The E-Plex FIPS-201 contains the following system components:

- E-Plex 5800 FIP-201 compliant lock(s)
- Smartcards (FIPS-201 compliant or DESFire) and Smart Card enroller
- Microsoft OS compatible PC or Laptop running the E-Plex FIPS-201 Host PC applications software – “FIPS-General” or the “FIPS-High Assurance” version
- A Microsoft OS compatible Netbook PC (portable) or the same laptop as above to program and audit locks using the FIPS-201 PC M-Unit part of the software

## E-Plex 5800 Lock

The E-Plex 5800 door lock is a stand-alone, battery operated electronic lock that grants access to authorized users. An E-Plex 5800 lock will grant access if a user presents a valid Smartcard to the Smartcard reader on the lock front housing or enters a valid PIN followed by an associated valid Smartcard. The lock can store up to 3,000 unique users and store the last 30,000 transactions (audits) in the lock memory. There is only one global Master User per lock.

### Lock Modes

You can access the E-Plex 5800 lock by four modes:

- Default Factory Mode – The lock is shipped from the factory in Default Factory Mode with a default factory Master PIN. In the factory mode, the lock can only be opened with the Default Factory Master User PIN of “12345678 and no Smartcard is recognized by the lock.”
- Access Mode by “**LearnLok**” – This mode refers to a lock that is operational for user access after the factory default Master PIN of 12345678 is changed to something else. When the lock enters the Access Mode in LearnLok mode, the Master (and Manager users) can add or delete regular users in the lock simply by entering relevant command codes at the lock keypad. Please refer to the “**E-Plex 58xx FIPS Lock Series Operations Manual**” for details.
- Access Mode by Software – This mode refers to a lock that is operational for user access AFTER it is programmed by the M-Unit with its lock/user configuration data downloaded from the E-Plex FIPS-201 system software. When the lock enters the Access Mode, the method of lock access is either Smartcard only or PIN followed by the associated Smartcard. However, optionally you can assign certain Service users with PIN only access, if required. **Important:** From now on, all “LearnLok” specific lock keypad commands to add/delete users at the lock without software and PDA will not work in the lock. That is, the lock can be operated only in conjunction with software, from now on.
- Pushbutton Programming Mode – This mode is typically used to program or audit the lock. In this mode, the Master User, the Manager(s), or the M-Unit User(s) can enter one or more command sequences to program and configure the lock, or download the lock audits.

For more information about using the lock in these modes, refer to **States of the Lock** in Chapter 4, **Operating the E-Plex Lock at its Keypad**.

## Lock Access Methods

You can open a lock using one of the following different access methods – either by Smartcard only access, or by PIN followed by Smartcard access, or optionally for selected Service users only by PIN only access. You can set up the lock to require different access methods for different users or for the same user operating the lock on different access schedules.

### Smartcard Only

Only the presentation of a valid Smartcard is required to access the lock.

### PIN and Smartcard

The entry of a valid PIN followed by the presentation of a valid associated Smartcard is required to access the lock. Access through PIN and Smartcard is referred to as “Dual credential” access.

*Important:* The global user PIN length is configurable from 4 to 8 digits, but the first 4 digits *must be* unique for security reasons.

### PIN Only for Service Users only

Only entering of a valid PIN is required to access the lock – but only if programmed as such for selected Service users only, ie, all regular Access users, Manager users and the global Master do not have PIN only access.

## Smartcards and Smart Card Enroller (Reader/Writer)

The E-Plex 5800 lock supports both FIPS-201 compliant PIV (Personal Identity Verification) Smartcards and DESFire Smartcards for access control as the primary method of lock entry for users. An authorized E-Plex FIPS-201 system Operator enrolls Smartcards for users at the PC through the **SCM Microsystems SDI010** Smartcard enroller which is actually a reader/writer device. That is, the enroller can read user ID card data, either from the contact side of the FIPS-201 compliant PIV card, or through the contactless interface of a DESFire card; it can also write user ID and related data onto a DESFire card.



### FIPS 2.01 Card

A sample FIPS 2.01 card is shown below which is the “contact” based Smartcard. Note the gold contact pad where the user ID related data is stored including the biometric and the photo data of the user. All FIPS-201 compliant PIV cards are already authenticated

and produced by the applicable U.S. government agencies with appropriate user ID data and so the E-Plex FIPS-201 software only reads and verifies the user ID related data on these cards, excluding the biometric data. In the card enroller, the user ID data is read from the contact side, and in the E-Plex 5800 lock, it is read through the card's contactless interface.

The following smartcards are FIPS-201 compliant:

- **PIV** (Personal Identity Verification, issued to U.S. government federal employees)
- **FRAC** (First Responder Authentication Credential, issued to non-federal employees)
- **TWIC** (Transportation Worker Identity Credential, issued to TSA, Port Authority et al personnel)
- **CAC NG/EP** (Common Access Card, Next Generation/End Point, issued to U.S. military personnel by the Dept. of Defense).

The E-Plex FIPS-201 software only reads the pre-encoded FIPS-201 cards for validity and verification based on sophisticated software algorithm.



### *DESFire Card*

A sample DESFire card is shown below which is a “contactless” based Smartcard. The DESFire card can be encoded and assigned by the E-Plex FIPS-201 software for those users like the visitors who may not have the FIPS-201 cards assigned to them, or as a temporary replacement cards for lost FIPS-201 cards.



## Smartcard Contact/Contactless Enroller (reader/writer)

The SCM Microsystems SDI010 contact/contactless Smartcard enroller is shown below. Note the card slot in front where the contact part of the FIPS-201 card will need to be inserted with the gold contact pad facing up and inserted in first to read (only) the card data. For the reading or writing to a contactless only DESFire card, you just need to present the card close to the top of the enroller for a second or so.

## PC and E-Plex FIPS-201 Software (Server and Client modules)

The E-Plex FIPS-201 software when installed allows you to manage your door locks and the associated user data from one standalone PC. It also offers auditing and reporting capabilities. The software consists of the “Server” and the “Client” parts/modules which can both be installed on a single Standalone PC along with the SQL server database.

Optionally, you can install the server related modules and the SQL database on a separate Server PC only, and then install the Client related modules on one or more individual Client PCs in a networked configuration. In this networked configuration, you must have the right card enroller connected to each client PCs if you use card/token based E-Plex locks.

## Portable PC M-Unit (Netbook/Laptop) and PC M-Unit Software

The E-Plex “universal” PC M-Unit software is installed on either, (i) the same PC where the main FIPS-201 applications software is installed or (ii) on a separate mini Laptop / Netbook PC. In either case, the M-Unit software will work in conjunction with **Kaba’s PC M-Unit IrDa Communications Kit** to program and audit the locks.

This portable PC M-Unit device, in addition to letting you program and audit the lock, allows for the downloading of Users/Locks configuration data from the PC to the M-Unit, and also the uploading of the lock audits data from the M-Unit back to the PC for Reports at the PC.

## System Definitions

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This section contains system definitions for the following items:

- PC System Operator Classifications
- Door Groups and Doors
- Access Schedules
- Holidays/Vacations
- Access Groups
- Lock User Personnel Classifications (Departments & Users)



# PC System Operator Classifications

- Three types of operators can use and operate the E-Plex FIPS-201 software:
  - **Level 1 Operator** – The software system can have up to 10 Level 1 Operators. The global Master user of the system will automatically become the very first Level 1 Operator. All Level 1 Operators will have the highest system authorization and will have access to all operational functions of the E-Plex FIPS-201 software. Any Manager user can also be assigned as Level 1 Operator (or as Level 2 but not as Level 3).

The Level 1 Operator can add Level 2 or Level 3 Operators to the Enterprise system. The Level 1 Operator can add a maximum of 255 Level 2 and Level 3 Operators combined to the system. When a Level 2 or Level 3 Operator is added to the system, this Operator's Logon Name and Password must also be established.
  - **Level 2 Operator** – Can be a maximum of 255. Level 2 Operators can perform all functions of Level 1 Operators, with the exception of the following:
    - Adding, modifying, or deleting any other operators
    - Adding, modifying, or deleting any managers
    - Modifying the site's software "Private ID"
    - Will not be able to view any user's access PIN
  - **Level 3 Operator** – Can be a maximum of 255. Level 3 Operators can be M-Unit and/or Access users only and can perform all functions of Level 1 Operators, with the exception of the following:
    - Adding, modifying, or deleting any other operators
    - Adding, modifying, or deleting any managers
    - Modifying the site's software "Private ID"
    - Will not be able to view any user's access PIN
    - Cannot perform a system database restore operation
    - Can only change her/his own Password in the *System Setup*.
  - **Note 1:** An M-Unit user can be assigned only as a Level 3 Operator; this user cannot login to the E-Plex FIPS-201 (Client) software but can login to the "Separate" (if configured as such) PC M-Unit software to program/audit locks.
  - **Note 2:** An Access user can be only a Level 3 Operator; s/he can login to the FIPS-201 software but cannot perform any M-Unit software functions to program/audit locks.
  - **Note 3:** The Guest and Service users cannot be assigned any Operator status – Level 3, 2 or 1.

## Door Groups & Doors

You can define up to a maximum combination of 100,000 door groups and doors in the system database. A door group represents a group of physical doors that contain the E-Plex 5800 locks. For example you can have a couple of door groups called "DG-Factory" and "DG-Offices", each containing the door locks belonging to them.

In each door group, you must assign one (and only one) Door Group (DG) Manager user. However you can assign many regular Manager users to each door group. The DG Manager will have complete access to all the doors in this door group without any restrictions. This is very similar to the global Master user having complete access to all

the door groups and doors in the facility, the difference here being that this DG Manager will have complete access only to her/his doors in this door group rather than the doors in the entire facility.

## Access Schedules

You can define an unlimited amount of access schedules in the system database. However, you can define only up to 16 access schedules in a lock. When assigning access schedules to a user, you may only use the access schedules that have been assigned to the lock. There is a default access schedule, "Always" (24 hours per day, seven days per week), that is built into the system software and cannot be changed or deleted.

An access schedule is a defined time period during the span of a week during which users are granted access to a door. Operators using the E-Plex FIPS-201 software at the PC define the access schedules by selecting the days of the week that the schedule is active and by specifying the schedule's start time and end time for the days specified. You can define a descriptive schedule name for each access schedule. Once defined, you can assign access schedules to a door from the **Access Assignment** menu of the software. A maximum of 16 access schedules can be assigned to a single door.

Because you may specify whether the door access method is Smart Card or PIN and Smart Card, the different access schedules in the system cannot overlap.

If you have a need for periods of time where access for certain groups of users overlaps partially, you will need to break those time periods into separate access schedules. Also, an access schedule cannot bridge a time period between two consecutive days. If you have an access schedule that needs to start before midnight and end after midnight, you must set this up as two separate access schedules.

### Example

During the week, I have three shifts at my company:

- First Shift – 7:00 a.m. to 3:00 p.m.
- Second Shift – 2:00 p.m. to 11:00 p.m.
- Third Shift – 10:00 p.m. to 8:00 a.m.

These three shifts will need to be broken into seven access schedules so they do not overlap:

- 7:00 a.m. to 2:00 p.m. – First shift
- 2:00 p.m. to 3:00 p.m. – First and second shift overlap
- 3:00 p.m. to 10:00 p.m. – Second shift
- 10:00 p.m. to 11:00 p.m.– Second and third shift overlap
- 11:00 p.m. to 12:00 a.m. – First part of third shift (first day)
- 12:00 a.m. to 7:00 a.m. – Second part of third shift (next day)
- 7:00 a.m. to 8:00 a.m. – Third and first shift overlap

By default, all user types (except the global Master and the Door Group Manager(s)) are not assigned any access to the lock. These user types include the Manager users, the Access users, the Guest users and the Service users. One or more of the access schedules must be assigned to these user types who must have access to the affected locks/doors .

Choose from access schedules that have been previously defined for the door, which means that the maximum number of access schedules that can be assigned to a user for a particular door is the number of access schedules defined for the door, up to 16.

## Holidays/Vacations

You can define an unlimited amount of holidays/vacations in the system database. However, you can define only up to 32 holidays/vacations in a lock.

A holiday/vacation template is a defined time period during which users will NOT be granted access to a door. By default, there will be no access allowed to a door/lock during a defined holiday/vacation period, except for the global Master user and the individual Door Group Manager users for their door groups only. The Service Users, and any "privileged" users who are set up to override the holidays/vacations will also have access during the holiday/vacation period.

## Access Groups

An Access Group is setup when you define a collection of doors WITH an Access Schedule assigned AND an access credential required during this schedule (card only or PIN & card access) to each one of these doors. This makes it easy when the operator wants to add a new user in the system database that should have access to many doors at various schedules very quickly saving enormous keyboard entries time.

## Lock User Personnel Classifications – Departments & Users

Up to six different types of users can perform various operations at the lock:

- **Master User** – The Master User is the top-level user who performs the initial lock setup activities and can program all lock functions. There is only one (global) Master User per facility (all door groups and all doors) whose credential will be accepted in all locks in the entire facility. The Master User is the only user who has "Always" access to any lock, and has all the access privileges all the time and cannot be locked out. The global Master user's credential (Card only, or PIN & Card) acts just like an emergency mechanical override key. The Master User's PIN is always eight digits in length. In E-Plex 5800 locks.
- **Manager & Door Group (DG) Manager Users** – A regular Manager User is a second-tier administrator who can program most of the lock functions as the Master user and these are specified in the Error! Reference source not found. table in Chapter 4, Error! Reference source not found. **at its Keypad**. Each lock can have up to 3,000 Manager Users.

The Door Group (DG) Manager on the other hand is just like the global Master user, except that her/his credential is always valid without any restrictions only in the doors belonging to her/his Door Group. All locks/doors belonging to a Door Group must contain one and only one Door Group (DG) Manager, though you can have multiple regular Manager users in the same door group.

- **Access User** – An Access User has only the ability to open locks. Each lock may have up to 3,000 Access Users, which are permanent. However, their credential do expire in the system and the locks in 3 years from the time of enrollment, or earlier if the expiry encoded on the card (FIPS-201 or DESFire) is earlier than 3 years.
- **Guest** – A Guest only has the ability to open locks, just like an Access user except the maximum expiry for a Guest user is one year. Each lock may have up to 3,000 Guest Users, which are temporary and last between 1 day and 365 days (1 year).
- **M-Unit User** – An M-Unit User does not have access to open any locks. The M-Unit User can only perform maintenance on locks using the M-Unit handheld, as well as any lock programming and auditing. Each lock may have up to 3,000 M-Unit Users. The credential for an M-Unit user is card only (no PIN associated)
- **Service User** – A Service User has authorization any time of day to a lock for a specified period of time -> either one-time entry ("one shot") only; or from 1 hour to

96 hours access only from the first time he or she presents the credential, or with no expiry access. The Service user's credential is either card only or PIN only (but no PIN followed by card access). The Service user has access anytime, irrespective of the door's access schedule setup and/or the door's credential requirement setup (PIN, card or PIN & card).

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**Note:** All of the user types, including Manager Users, can have one or all of the following three privileges:

- Override holidays/vacations
  - Override deadbolt privacy
  - First entry passage authorization
- 

## The E-Plex FIPS-201 Software Package

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There are three (3) software packages/kits available from Kaba to be used with the E-Plex FIPS-201 system as described below:

(1) **Kit #1: E-Plex FIPS-201 Software CD Kit**

This kit includes the following items:

- a. E-Plex FIPS-201 (General or High Assurance) Software installation CD.
- b. E-Plex FIPS-201 Getting Started Sheet.
- c. E-Plex FIPS-201 Software User Guide (this guide) in electronic form on the CD.

(2) **Kit #2: E-Plex FIPS-201 Implementation Kit**

- This package combines the E-Plex FIPS-201 Software CD Kit (**Kit #1** above) and the E-Plex PC M-Unit Communications Kit (**Kit #3** below).
- Kit #2 is the only kit you will need to run the FIPS-201 software system in your facility. You need this whether your PC M-Unit part of software module runs on the same laptop PC where the main FIPS applications software is also running, or that you are planning to use a dedicated/separate Netbook/Mini laptop PC to run the PC M-Unit software.

(3) **Kit #3: E-Plex PC M-Unit Communications Kit**

- A Laptop or a Netbook PC does not have a built-in IrDA interface. This kit will provide that interface when connected to the M-Unit PC's USB port to "talk" to the lock via IrDa communications. This kit includes the following items:
- A USB Flash drive, pre-loaded with the PC M-Unit Software and the PC M-Unit User Guide.
- E-Plex PC M-Unit Getting Started Sheet.
- An IrDA-to-USB adapter and a USB extension cable.



USB Flash Drive with M-Unit Software



IrDA Adapter with extension Cable

# 2

# Getting Started

The contents of this chapter are intended to assist you with installing and setting up your E-Plex FIPS-201 system software to work with an E-Plex 5800 FIPS lock series.

The items explained in this chapter include the following:

- System Requirements
- Basic System Setup and Software Installation (via *Appendix-B*)
- Main Menu & Toolbar

# E-Plex FIPS-201 System Requirements

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## PC & OS Requirements

### Standalone PC (for “Express” Install – *applies to E-Plex FIPS-General only*)

- MS Window’s compatible PC with minimum Pentium-III 500+MHz processor
- Minimum 1 GB of RAM.
- Minimum of 4 GB of free hard disc space when using smaller SQL database
- SVGA Monitor with minimum resolution of 1024 x 768
- CD-ROM drive for software installation
- Minimum of 2 USB ports in PC to connect the Smartcard Enroller and the M-Unit PDA
- One of the Microsoft Operating Systems below:
  - MS Windows XP Professional (SP 3 or higher),
  - MS Windows VISTA Home Premium or Business – 32 or 64 bit versions, or
  - MS Windows 7 Home Premium or higher – 32 or 64 bit versions
- MS SQL Express 2005 (SP3 or higher) – supplied with FIPS software

### Networked PCs (for “Custom” Install - *applies to General & High Assurance*)

- **Client PC:** Same requirements as Stand Alone PC above, except the MS SQL
- **Server PC:** Same requirements as Standalone above, except
  - Recommended 2+GB of RAM when using larger SQL database
  - Recommended 10+GB free hard disc space for larger SQL database
  - MS Windows Server 2003 & 2008 OS (if not using XP, VISTA or Windows 7)

## Maintenance Unit (M-Unit) Requirements

- **Standard Laptop PC:** Same requirements as Standalone PC above, or
- **Mini Laptop (Netbook) PC:** Microsoft XP Home or higher OS and minimum 1MB of RAM, minimum 1024 x 600 screen resolution, 4GB of storage memory (flash or hard-drive), 1 available USB port. Optionally, wired or wireless LAN interface for network communications via IP address to host PC

**Note:** Either of the above M-Unit PCs requires Kaba’s ***E-Plex PC M-Unit Communications Kit*** as an accessory containing a USB Flash drive with PC M-Unit program pre-loaded & a USB>IrDa adaptor for PC <->Lock communications.

## FIPS Card Enroller Requirement

- **SCM Microsystems SDI010:** an ISO 14443 compliant Enroller (dual: reader/writer) with USB interface to enrol the FIPS compliant and/or the DESFire smart cards – **Required**



# Basic System Setup & Quick Start Tips

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Complete the following steps in this order prior to setting up the system for use:

Note: In this example, it is assumed that you will be using one standalone laptop to run the E-Plex FIPS-201 Server/Client applications software, and again use the same laptop to operate it as a portable M-Unit device to program/audit locks.

1. The actual **Software Installation section** is found at the very end of this manual under “**Appendix-B**”. Please continue to read this section and then jump to the *Appendix* section to actually install the applications software from the E-Plex FIPS-201 software CD on your laptop.
2. Ensure that you have the administrative rights to install the software on the PC. If you do not, you will require your IT personnel’s help in installing the software. During installation, you will be required to register the E-Plex FIPS-201 software with Kaba so as to activate and use the software.
3. Connect your **Smartcard ID Enroller** – which enrolls the contact side of the FIPS-201 compliant ID badge, and/or also the contactless side of the DESFire card (if used), to the PC through a USB port. Important: Ensure that the enroller driver is already installed from your E-Plex FIPS-201 software CD.
4. **(Standalone) Express Installation:** For most situations, you will be installing the software (which consists of the Server, Client & M-Unit parts of the modules) on one standalone PC. Select the “Standalone / Express” install option which will automatically install all FIPS-201 software modules without any user/operator intervention, **OR**

**(Custom) Network Installation:** If on the other hand, you are going to be using a separate Server PC and one or more Client PCs in a networked environment, please check with your IT/Network Administrator for software installation rights, SQL password details etc. Typically, all Server related Prerequisites, followed by the Server part of the software module and the E-Plex SQL database module will need to be installed on the Server PC; you will be registering the software with Kaba during the Server part of the installation only, once. Then on each Client PC, you must install all Client related Prerequisites, the Client part and the M-Unit part of the software – as specified in the “(Software) Install Procedure” document on the CD. You must also connect a Smartcard ID enroller to desired Client PC(s) to enroll your facility’s user ID badges.

## Software Installation & Registration

- Please refer to the **Appendix-B** at the end of this user guide on how to install the software. You will be also required to register the E-Plex FIPS-201 software with Kaba to receive the registration/activation key to be able to install and use the software.

## Quick Start Tips

You can follow these useful tips to quickly set up and use the E-Plex FIPS-201 system and the associated E-Plex 5800 locks in your facility:

- Click the **E-Plex FIPS-201 Client** icon on your PC desktop to launch the software.
1. Set up the global Master User for the application and if it is you, remember your new Level 1 Operator Name and Password for future login sessions. Change the default “Your Private ID” number from 99999999 to a different 8-digit number. This Private ID combined with an internal unique number in your software is used as your unique *Customer Security key*. This unique key is encrypted and passed back and forth between the PC software, the M-Unit and the locks during

their data communications. Refer to **Logging On for the First Time** in this chapter for more information.

2. Change the default 8-digit Master PIN 12345678 (to be used in the locks by the global Master) to a different 8-digit Master PIN and remember this important PIN.
3. On the *System Setup* window, change any default parameters, such as all users' PIN length, date/time format etc, if desired.
4. Your unique 10-digit Software License number is displayed on the **Help | About** window. You will need to refer to this License number when contacting Kaba's technical support team to receive any technical support.
5. Ensure that the Smartcard enroller is connected to your PC.
6. Create your *Access Schedules* – assigning each schedule with period of time for each day when users should have entry access.
7. Optional: Create your *Holidays and Vacation blocks*.
8. Create your *Door Groups*.
9. Create your *Doors*, one door at a time – assigning each door with its various configuration parameters.
10. Optional: Create your *Access Groups* – assigning each access group with door or doors with schedules attached to each door.
11. Create your *Departments* (referred to as *User Groups* in FIPS-201, version 1.x software)).
12. Create your *Users*, one user at a time – assigning each user with various user parameters such as a PIN, user type etc. You will also need to enroll the user's ID card, whether it is a FIPS-201 compliant card or a DESFire card to have access to any E-Plex 5800 locks in the facility.  
Important: The "Service user" type does not have to be assigned a card; s/he can have PIN only access anytime !.
13. For each user, you can also assign an Access Group, if you had already created a few access groups earlier, Or  
*Access Assignment:* If you did not create any Access Groups in the system, you can assign the user to a door for access under the Access Assignment menu. Select a previously created door and assign schedules and access credential required (PIN only, card only or PIN & card) during each schedule, holidays/vacations and assign users for this door who should have access. Additionally, assign schedules to each user in this door including any user Privileges, if desired.
14. Repeat Steps 12 through 13 above for other users created in the system for door(s) access.

---

**Important: Ensure that the actual E-Plex 5800 lock on the door to be programmed is properly installed and initialized and its Lock Function is configured (for Privacy and/or Residence locks only), according to the Lock Function Setup Instructions that came with the lock in the box.**

---

15. *Transfer/download* your locks <-> users configuration data from the PC database to the *M-Unit* part of the database so as to be able to *program the locks* with the M-Unit.
16. Take the M-Unit (the same laptop or a separate Netbook PC) which contains the M-Unit program to each of the desired doors/locks and *program* them, one at a time. Repeat this step to program all locks in your facility.
17. Similarly, you can go to the desired locations and *audit the required locks* in your facility for later uploading back to the PC for viewing/printing the lock audit Reports.

## Software Installation & Registration

- Please refer to the **Appendix-B** at the end of this user guide on how to install the software. You will be also required to register the E-Plex FIPS-201 software with Kaba to receive the registration/activation key to be able to install and use the software.

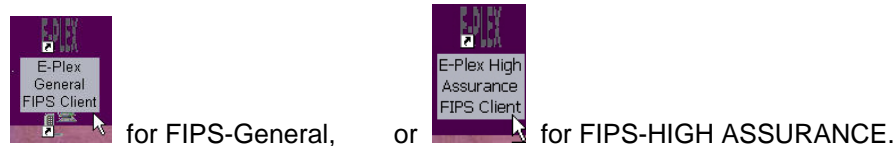
### Starting the E-Plex FIPS-201 Server and Client Software on the Standalone PC (or, on a Client PC in networked configuration)

---

**Note:** Ensure that your Smartcard enroller is connected to your (Client) PC through the USB port and is recognized by the PC.

---

You can start the E-Plex FIPS-201 on the PC by clicking the installed **E-Plex FIPS-201** icon on the desktop.



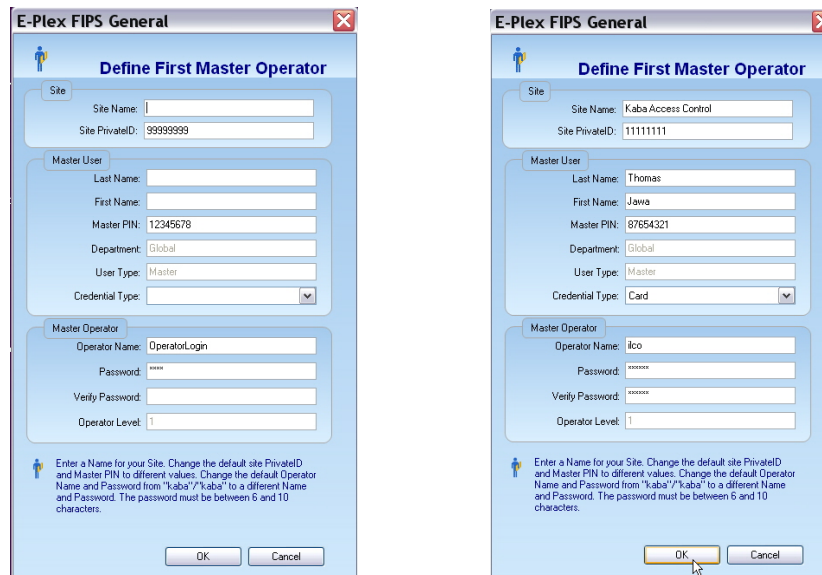
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**Note:** Do not delete the default desktop icon or modify it in any way.

---

### Logging On for the First Time

When you have clicked the **E-Plex FIPS-201 Client** icon on the desktop for the very first time, the software displays the **Define First Master Operator** window.



- Enter your **Site Name** (your company or facility name) which will be displayed on your system reports.
- Change the default **Site Private ID** (99999999) to a different value; this value combined with an internal unique factory number will be your database encryption/decryption key.
- Enter the following information in the **Master User** fields for the global Master of the system:

- Last Name
- First Name
- Master PIN number – must be 8 digits long.

---

**Note:** The default factory Master PIN number is 12345678. You will be prompted to enter a different 8-digit PIN number which you must enter and remember it (or write it down and store it in a safe place) for routine use.

---

Select a **Credential Type** from the drop-down list. By default it is **Card** only credential meaning that the Master user needs to present only her/his card when programming or auditing the locks. If you choose **PIN & Card** credential, then the Master will be forced to use dual credential (PIN and card) every time s/he accesses the lock for programming or auditing. **Important:** You must assign a card (FIPS or DESFire) to the Master under “Add User” menu for the Master’s credential to work in the lock after programming the lock.

Enter the following information in the **Master Operator** fields for this same global Master user:

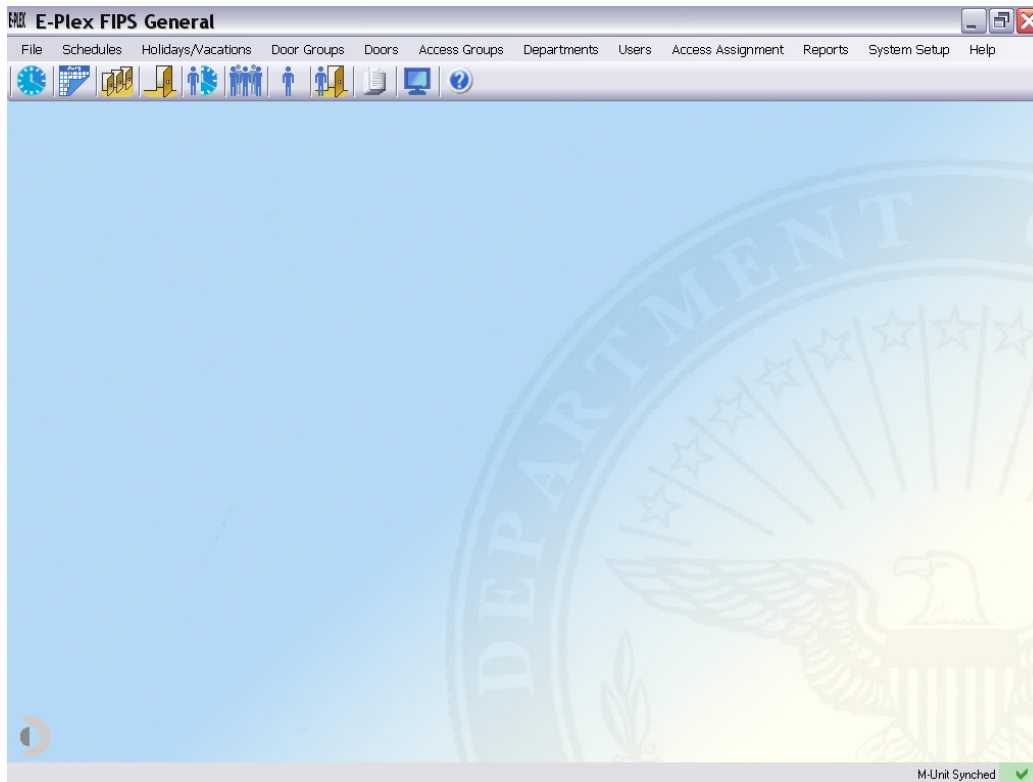
- (Master) Operator Name ; this can be same as the Master’s Last or First name.
- Password – minimum 6 alphanumeric characters
- Verify Password

---

**Note:** You must create both Operator name and Password to proceed further to login to the system. The Operator name “kaba”, “Kaba”, “KABA” etc are not allowed.

---

Click **OK**. The software displays the Main Menu for the E-Plex FIPS-201.



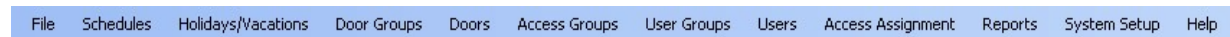
# Main Menu and Toolbar

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This section describes the Main Menu and Toolbar, which are the primary points to access the functions of the E-Plex FIPS-201.

## Main Menu

The Main Menu provides access to all functions and displays the available menu options.



The following 12 drop-down menus are available from the Main Menu:

- File
- Schedules
- Holidays/Vacations
- Door Groups
- Doors
- Access Groups
- Departments (Note: In previous FIPS-201, version 1.x software, this field was called User Groups; both terms mean one and the same!)
- Users
- Access Assignment
- Reports
- System Setup
- Help

Refer to the appropriate section in the manual in Chapter 3 for more detail on each of the options that are available from the drop-down menus. These options are also available from the Toolbar.

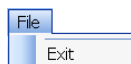
## Toolbar

The Toolbar is located directly below the Main Menu and displays the icons for the Main Menu options.



You can select an icon on the toolbar by positioning the mouse pointer on the icon and clicking the left mouse button one time. The menus available from the E-Plex Main Menu and the corresponding Toolbar icon (if applicable) are described in the following sections.

### File Menu



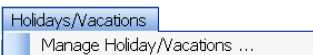
From the **File** menu, you can exit the software.

### Schedules



From the **Schedules** menu, you can add, edit, or delete unlimited number of access schedules in the system database. **Note:** You can assign a maximum of 16 schedules in each lock out of these total number of schedules in the system database. An access schedule is a defined time period during the span of a week in which users can be granted access to the door. One of the 16 schedules will have an “Always” (24/7) access schedule that is built into the system software; this schedule cannot be changed or deleted. Schedules with different access credentials, for example PIN and Smart Card schedules and Smart Card only schedules, cannot overlap.

## Holidays/Vacations



From the **Holidays/Vacations** menu, you can create unlimited number of holidays/vacations in the system database but can set up a maximum of 32 holiday and vacation schedules per lock. When a holiday/vacation period (one day or a consecutive block of days) is assigned to a door, the door will NOT grant access to any Users during that period. Holidays/vacations can be overridden by all Service Users, plus any other selected “privileged” Access and Manager Users.

## Door Groups



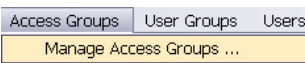
From the **Door Groups** menu, you can add, edit, or delete any number of door groups. Each Door Group must contain one (and only one) Door Group Manager.

## Doors



From the **Doors** menu, you can add, edit, or delete any number of physical doors with associated E-Plex 5800 lock configuration parameters. You must select and assign from previously assigned Access Schedules in the system, one or up to 16 access schedules with Credential Type (card only or PIN and card) for each schedule period. You must ensure that these access schedules do not overlap, but if you do, the system will prompt you to correct this scenario. Optionally, you can also select and assign from previously assigned Holidays/Vacations in the system, one or up to 32 holiday/vacation periods. Free passage is disabled in the lock by default but you can enable one of three Passage mode options for each schedule period – Manual passage (at lock keypad), Automatic Schedule based passage or First authorized user access passage.

## Access Groups

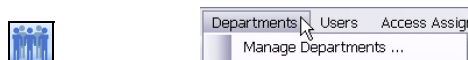


From the **Access Groups** menu, you can add, edit, or delete any number of access groups which contain the doors with their schedules and associated users. An access group can consist of one or many doors, each with a schedule and credential type to use during that schedule info attached for each door. You can also assign one or many users in each access group you create. Additionally, each access group can be “cloned” as a new access group; this cloned access group can be edited to add or remove door(s) and/or user(s) from it very quickly instead of trying to create a new one from scratch, thus saving enormous operator data key entry time. Optionally, you do not need to create any access groups in the system if you have only a handful of locks/doors and only limited



users who will need access in your facility. If this is the case, you can configure your facility's door/user access assignment setup under the **Access Assignment menu**.

## Departments



From the **Departments** menu, you can add, edit, or delete any number of Departments. The use of Departments in the software is for your convenience to define and organize each one as a “user group” in your facility but is not recognized by the E5800 lock.

## Users

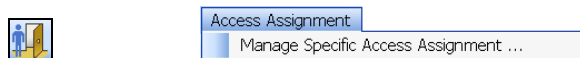


From the **Users** menu, you can add, edit, or delete any number of users in the database but up to 3,000 users and their associated PINs in a lock. You can also enroll (add) or remove their (previously) assigned Smart Cards – FIPS or DESFire. Additionally from this menu, you can assign a previously created access group to this user, generate and manage any Temporary DESFire only user cards - for both permanent FIPS and permanent DESFire card users, if required. There are five types of users in each lock:

- Manager ; lock programming/auditing rights; scheduled based access with optional privileges; 3 years max expiry
  - Door Group Manager: One (and only one) DG Manager in all locks belonging to her/his Door Group; 24/7 lock programming/auditing rights and 24/7 access with all privileges; ie., same functionality as the Global Master, except applies to this Door Group locks only
- Access ; scheduled based access with optional privileges; 3 years max expiry
- Guest ; scheduled based access with optional privileges; 1 year max expiry
- Service time ; 24/7 access from first access with various expiry options: either one entry only, or 1 – 96 hours expiry, or no expiry
- M-Unit ; 24/7 lock programming/auditing rights only but no access; 3 yr max expiry

Refer to the **Summary of Pushbutton Programming Commands** table in Chapter 4, **Operating the E-Plex Lock at its Keypad**, for detailed lock programming & auditing rights of the global Master, Manager(s) and the M-Unit(s) users.

## Access Assignment



---

**Note:** The **Access Assignment** menu is the most important menu; everything related to door <-> users access control info is tied together in this menu.

---

From the **Access Assignment** menu, you must select a door that you want to populate with valid users for access. For each user, select and assign required access schedules from the available door schedules that were previously assigned in the Door configuration menu for this door.

Also, for each user type, you can optionally assign any one or more of the following three Privileges:

- Override holidays/vacations ; by default, assigned to a Manger user but can be changed

- Override deadbolt
- First user passage entry ; by default, assigned to a Manger user but can be changed

After this access assignment process, the lock configuration data is set up and prepared to be synchronized with the M-Unit PDA for lock(s) uploading.

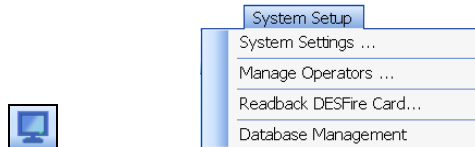
Note: The PC to M-Unit synchronization is always initiated by the M-Unit and not by the PC.

## Reports



From the **Reports** menu, you can generate many useful reports from the E-Plex FIPS-201 system database for viewing and/or printing. The reports can also be exported in PDF, Word, Excel etc file formats, if required.

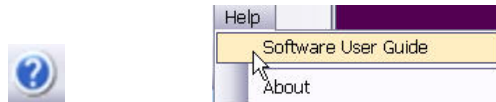
## System Setup



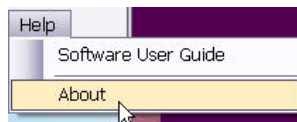
From the **System Setup** menu, you can set up and maintain all important system information, manage system Operators and their passwords, backup or restore system database etc.

Note: You can also read any DESFire user cards under this menu.

## Help



From the **Help** menu, you can either view/print the Software User Guide by clicking on *Software User Guide*, or can view the following info: E-Plex FIPS-201 Software Version number, End user's Site License number, Kaba's Technical Support phone numbers and Copyright information by clicking on *About*.





# 3 Using the E-Plex FIPS-201 Software

This chapter explains how to use the E-Plex FIPS-201 system software on a regular basis to suit your physical access control security needs. It typically involves the following items:

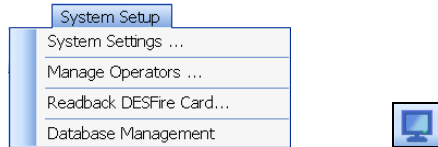
- System Setup Menu
- Managing Schedules
- Managing Holidays/Vacations
- Managing Door Groups
- Managing Doors
- Managing Access Groups
- Managing Departments
- Managing Users
- Managing Access Assignment
- Viewing/Printing/Exporting Reports

# System Setup Menu

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The **System Setup** menu allows you to define and maintain global system settings that, in most cases, you need to do this only during the initial system setup.

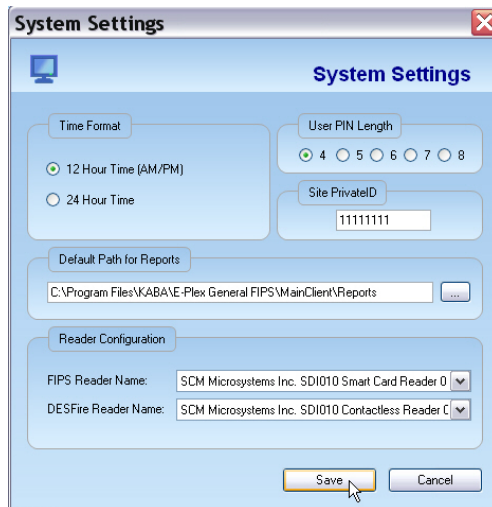
To access system settings, select an option from the **System Setup** menu or click the **System Setup** menu icon.



## Changing System Settings

You should establish the system settings before you begin using the E-Plex FIPS-201 on a daily basis. However, you can leave all the default values as they are, or use this feature at any time if you need to update any of the existing system configuration information.

From the System Setup menu, configure your **System Settings**. The system displays the **System Setup** window.



- Edit the following data areas as desired:
  - **Time Format and Daylight Savings Time (DST)**  
Select the display of **Time Format** for your system. The default is **12-Hour Time** (a.m. and p.m. display), and the other option is **24-Hour Time** display.

---

**Note:** The E-Plex FIPS-201 software uses the start and end dates/times of the DST setup (if enabled) directly from your PC's Operating System. You must also ensure that the DST setup and the current date & time are setup correctly on your M-Unit PDA. The M-Unit automatically sends this information to the locks every time the lock is programmed so that the DST switching in the lock will occur automatically in Fall and Spring.

---

- **Site Private ID**



Once set and used, this value which is part of the database and PC<->lock communications encryption/decryption key for your entire system should be altered only if absolutely necessary.

**Important:** If in the future after deploying your system and locks, for some reason you need to change the value of the Site PrivateID, you must re-initialize and re-program all the E-Plex 5800 locks in your facility. This is because the original encryption/decryption communications key inside the locks will have to be changed again since it has been modified now in the software.

- **User PIN Length**

Select the appropriate global **User PIN Length**—between four and eight digits that you will be using in your system. The default user PIN length is four digits.

Important: The first 4 digits must be always unique when assigning PIN numbers for each user later in the software; this is for security reasons.

- **Default Path for Reports**

This field defines the default directory path to be used when generating and saving reports files. You may change the path for reports to a CD-RW drive, network drive, or a USB flash drive etc.

- **FIPS and DESFire Reader Name Selections**

Leave the default (currently SCM Microsystems SDI010) shown in the drop down list.

- Once you have updated the desired fields, click **Save**. The software confirms that the changes saved successfully in the status bar of the window.

Changes successfully saved. , or

Click **Cancel** to close the **System Setup** window without saving changes.

## Managing Operators

The **Manage Operators** option allows you to create a new Operator and manage existing Operators in the E-Plex FIPS-201.

---

**Important:** *The first Operator that you create in the software upon installation automatically becomes a Level 1 (highest authority) Operator. Only Level 1 Operators can add or delete other Level 2 or Level 3 (lowest authority) Operators. See **Chapter 1** for a detailed description of the E-Plex 5800 FIPS **System Operator Classifications**.*

---

Complete the following steps to manage Operators:

- From the **System Setup** menu, select **Manage Operators**. The software displays the **Manage Operators** window.

**Manage Operators**

**User**

User Group: All User Groups

User: Griesbeck, Daniel

User Type: Master

**Operator**

Login: daniel

Operator Level: 1

Password: \*\*\*\*\*

Verify Password:

Save Close

Select a user to define as an operator (users can be filtered by user group). The password must be at least six but no more than ten characters long. Only level 2 and level 3 operators can be deleted. Level 2 and level 3 only can change their own password.

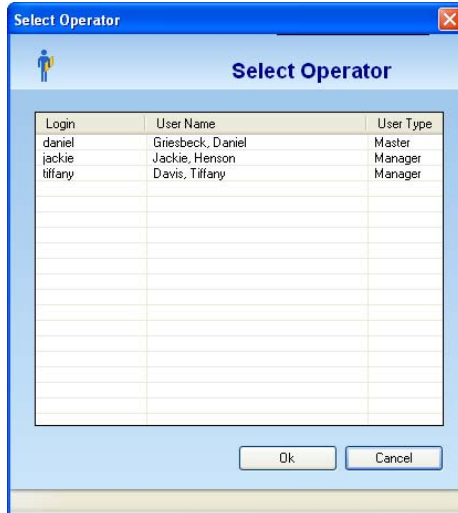
*User Area:*

- From the **User Group** drop-down list, select **Global** or **All User Groups**. To add, edit, or delete a user group, refer to **Managing User Groups** in this chapter.
- From the **User** drop-down list, select the appropriate user whom you want to be an Operator of the software also. To add, edit or delete a user, click the ellipsis button.

Refer to **Managing Users** in this chapter.

### Operator Area:

- In the **Login** field, edit the login ID. To select a different Operator, click the ellipsis button.
- Select the Operator from the **Select Operator** window and click **OK**.



- In the **Password** field, enter a Password for the selected Operator.

---

**Note:** The Password must be at least six but no more than ten characters long. Level 2 and Level 3 Operators can change their own password but cannot add or delete themselves.

---

- In the **Verify Password** field, re-enter the password.
- Click **Save**. The software displays confirmation that the changes were saved successfully.

Changes successfully saved.

- Click **Close** to exit the **Manage Operators** window.

### Deleting an Operator

The **Delete Operator** option allows you to delete an Operator from the E-Plex FIPS-201 software.

---

**Note:** Only Level 2 and Level 3 Operators can be deleted and that too by Level 1 Operators only.

---

Complete the following steps to delete an Operator:

- From the **System Setup** menu, select **Manage Operators**. The software displays the **Manage Operators** window.

**Manage Operators**

User

User Group: All User Groups

User: Griesbeck, Daniel

User Type: Master

Operator

Login: daniel

Operator Level: 1

Password: \*\*\*\*\*

Verify Password:

Delete

Save Close

Select a user to define as an operator (users can be filtered by user group). The password must be at least six but no more than ten characters long. Only level 2 and level 3 operators can be deleted. Level 2 and level 3 only can change their own password.

- Select an Operator by clicking the ellipsis button in the Operator area of the window.



Select the Operator from the **Select Operator** window and click **OK**.

**Select Operator**

Login	User Name	User Type
daniel	Griesbeck, Daniel	Master
jackie	Jackie, Henson	Manager
tiffany	Davis, Tiffany	Manager

Ok Cancel

- Click **Delete**. The software prompts you for confirmation.

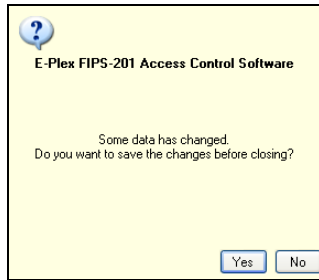
**E-Plex FIPS-201 Access Control Software**

Are you sure you want to delete this operator?

Yes No

- Click **Yes**. The system deletes the operator.

- From the **Manage Operators** window, click **Close** to exit the window. The system prompts you to save your changes.

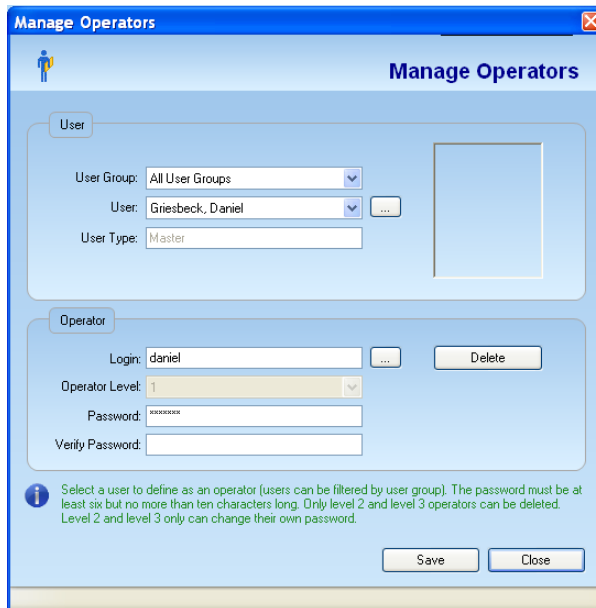


- Click **Yes** to save changes and exit the window. Click **No** to exit the window without saving changes.

### Changing an Operator Password

The **Change Password** option allows you to change an Operator's password. Complete the following steps to change an Operator's password:

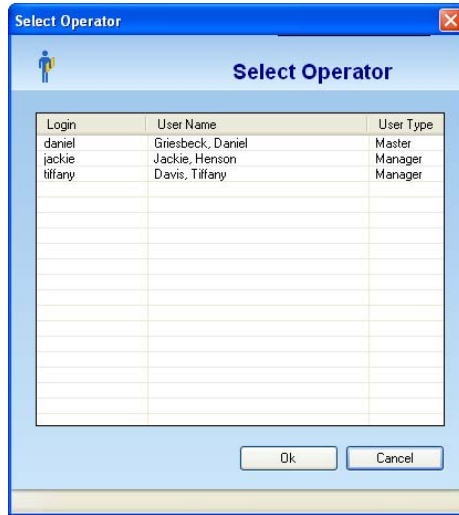
- From the **System Setup** menu, select **Manage Operators**. The software displays the **Manage Operators** window.



- Select an Operator by clicking the ellipsis button in the Operator area of the window.



Select the Operator from the **Select Operator** window and click **OK**.



- In the **Password** field, enter a new password for the selected Operator.

---

**Note:** The Password must be at least six but no more than ten characters long. Level 2 and Level 3 Operators can change their own password but cannot add or delete themselves.

---

- In the **Verify Password** field, re-enter the password.
- Click **Save**. The software displays confirmation that the changes were saved successfully.

Changes successfully saved.

- Click **Close** to exit the **Manage Operators** window.

## Reading a DESFire Card

Complete the following steps to read a DESFire user card:

- From the **System Setup** menu, select **Readback DESFire Card**. The system displays the **Readback DESFire Card** window.

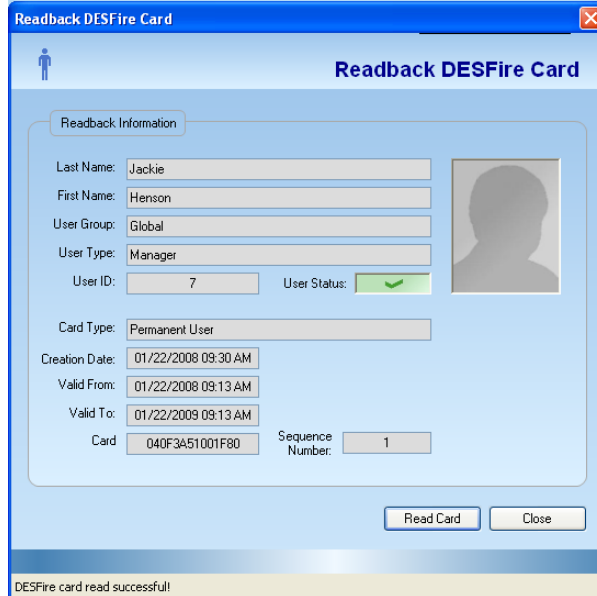
- Click **Read Card**.
- Present the DESFire card to the Smart Card enroller as shown.



- The enroller reads the card and displays a confirmation message.



- Click **OK**. The system displays the user information for this card, if present in the Readback DESFire Card window.



- Click **Close** to exit the window.

## Database Management (Backup & Restore)

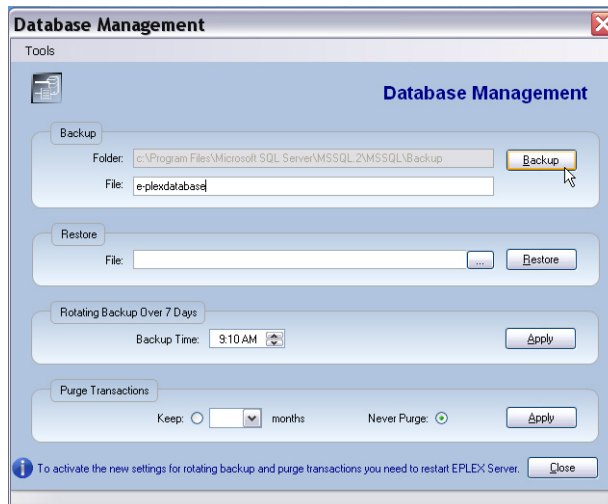
The **Database Management** feature enables you to periodically back up the database. You can also restore the last backed up database in case of corruption with the current database in the system. It is highly recommended that you perform a periodic back up of your database. After backing up in this specific MicroSoft SQL folder, you can copy this backed-up file to an external drive, a USB drive or a network drive etc.

**Important:** It is highly recommended that you perform a periodic back up of your database.

### Backing up the Database

Complete the following steps to back up the database:

- From the **System Setup** menu, select **Database Management**. The software displays the **Database Management** window.





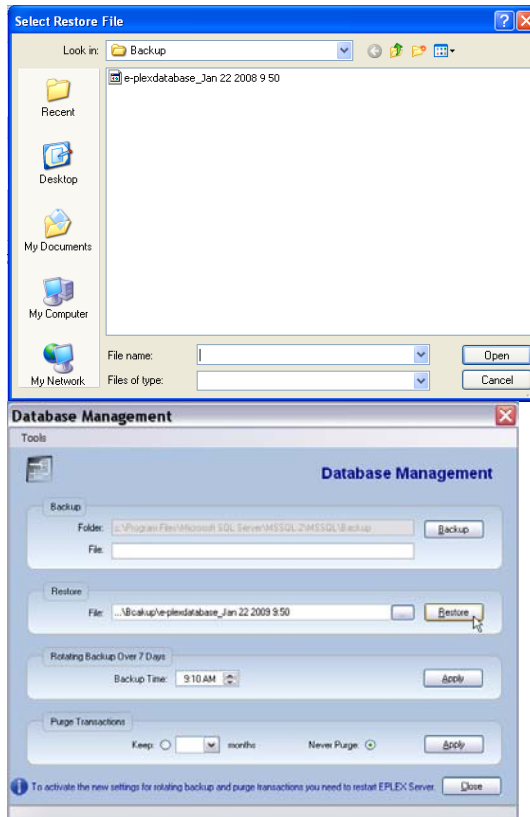
- Enter a file name in the **File** field of the **Backup** area.
- Click the **Backup** button to back up the database. The database will be backed up automatically in the secure Micro-Soft SQL system directory (by default) with date/time stamp for later retrieval, if need be. When the backup is complete, the system displays a message in the status bar of the **Database Management** window.

Backup Done: c:\Program Files\Microsoft SQL Server\MSSQL.1\MSSQL\Backup\e-plexdatabase\_Jan 22 2008 9 50

## Restoring the Database

Complete the following steps to restore the database:

- Click the ellipsis button in the **Restore** area.
- The system displays the **Select Restore File** window. Choose the database that you want to restore and click **Open**. The system displays the file location in the **File** field of the **Restore** area.



- Click **Restore**. The system prompts you for confirmation with a warning to say that this restore operation will overwrite your current database which will then be lost etc.
- Click **Yes** to continue or **No** to cancel.
- If you click **Yes**, the system restores the selected database and displays a message in the status bar of the **Database Management** window.

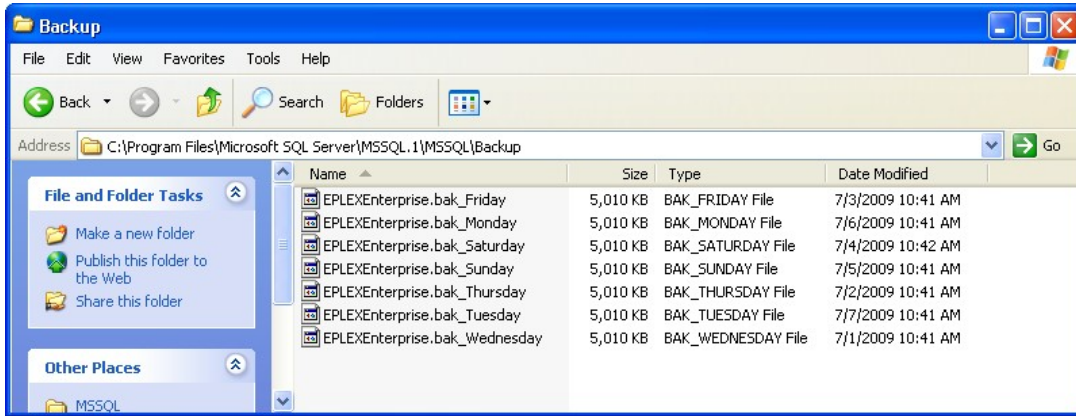
Restore Database Done

- Click **Close** to close the **Database Management** window.

## Rotating Backups Over 7 Days

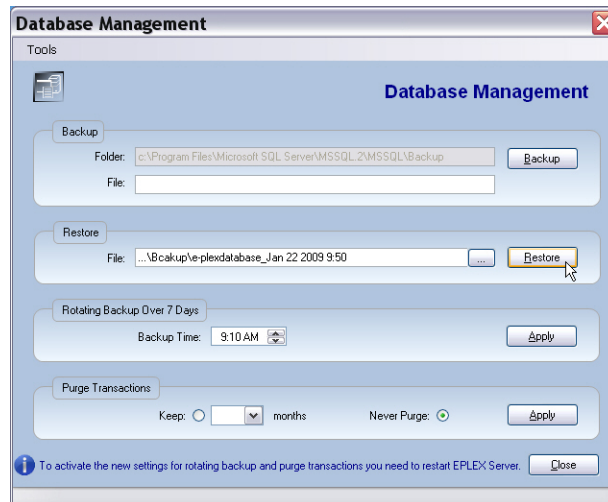
- In this section, you can specify at which specific start time a daily automated back-up will take place.
- Select the time you want the back-up operation to start and click **Apply**.

- The back-up will be performed daily at the specified start time; ensure that your PC will be “on” and stays “on” during this automated backup period everyday. The format of the saved files are as follows:



### Purge Transactions

- In this section, you can specify how long to keep the record of all operators’ activities at the Host PC’s E-Plex FIPS Database. This information is viewable via the “System Activity Log”, as described in the section called **Viewing / Printing / Exporting Reports**.
- You can choose either to **Keep** the PC activity logged transactions for the number of months you specify, or to **Never Purge** them.
- Make your selection and click **Apply**.

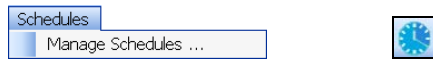


# Managing Schedules

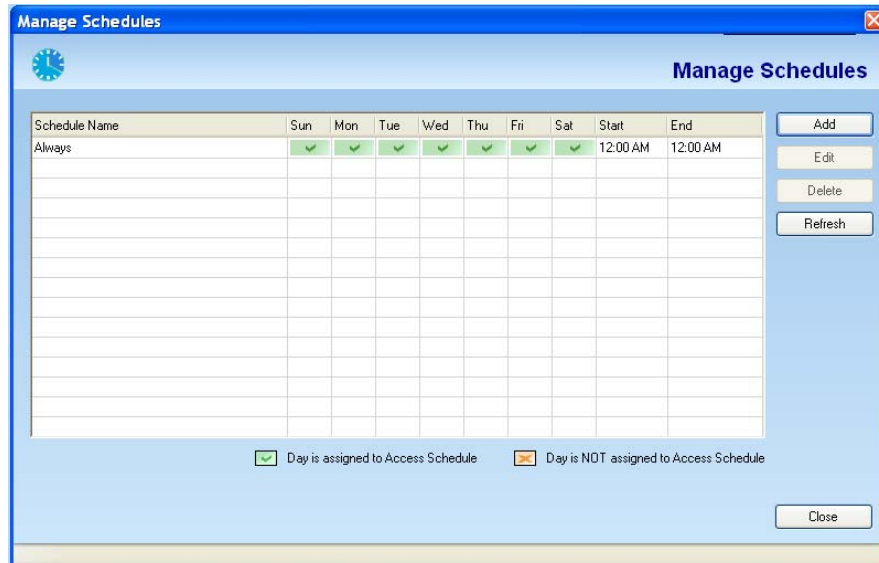
A schedule is a defined time period during the span of a week during which users are granted access to the door. The E-Plex FIPS-201 software allows you to globally define schedules. Once you have defined schedules, you will assign them to doors and to the users who will access those doors. The E-Plex FIPS-201 software allows you to manage schedules through the **Schedules** menu.

**Note:** You can define up to 16 schedules in the lock but any number of them in the software. However, the “Always” schedule is standard and is pre-defined in the software. It cannot be changed or deleted. The “Always” schedule allows 24/7 access to its associated doors and users.

To manage access schedules, select **Manage Schedules** from the **Schedules** menu or click the **Manage** button.



The software displays the **Manage Schedules** window.



From this window, you can add, edit, or delete access schedules.

## Adding a Schedule

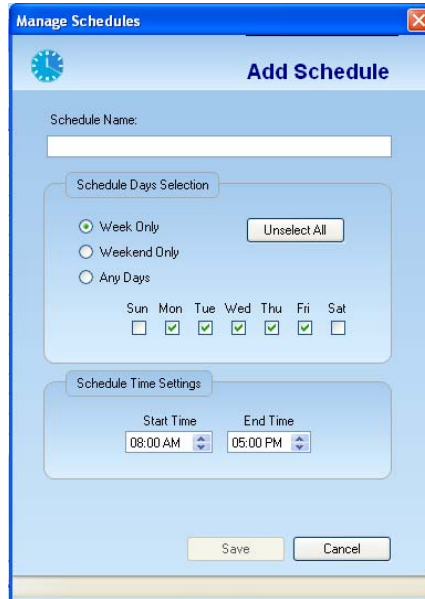
Complete the following steps to manage schedules:

---

**Note:** You may add additional schedules at any time.

---

- From the **Manage Schedules** window, click **Add**. The software displays the **Add Schedule** window.



In the **Schedule Name** field, type the name of the schedule you are adding – Egs. “Day-Shift” or “7AM-6PM, M-F” etc.

---

**Note:** The schedule name can be a maximum of 20 characters and may include special characters and spaces.

---

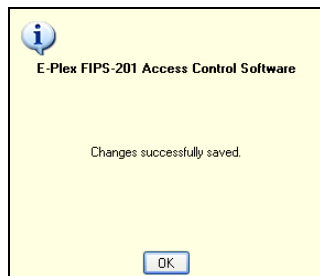
Select the appropriate time range: **Week Only**, **Weekend Only**, or **Any Days**.

Select the appropriate check box for the day(s) you want to add to the access schedule. These are the days that users will have access to a door.

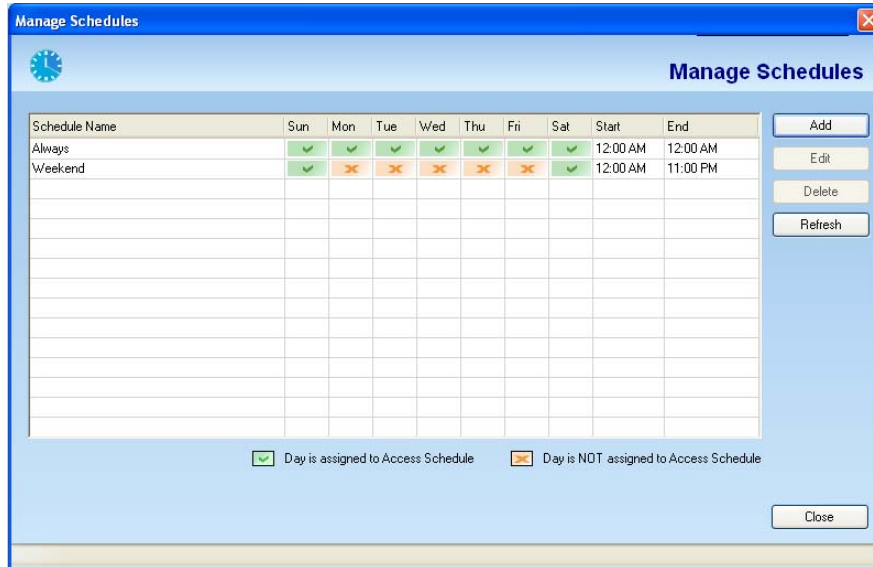
In the **Start Time** field, select a start time. This is the time that access begins each day.

In the **End Time** field, select an end time. This is the time that access ends each day.

Click **Save**. The software displays a **Changes Successfully Saved** message.



Click **OK**. The system displays the new access schedule in the **Manage Schedules** window.



Click **Close** to exit the **Manage Schedules** window.

---

**Note:** Once added, the access schedule becomes available in the **Schedule** drop-down list throughout the E-Plex FIPS-201 software.

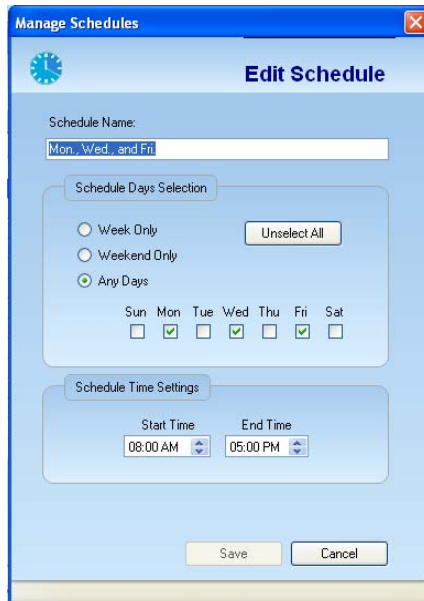
---

## Editing a Schedule

Complete the following steps to edit access schedules:

- From the **Manage Schedules** window, click an access schedule to edit.

Click **Edit**. The software displays the **Edit Schedule** window.

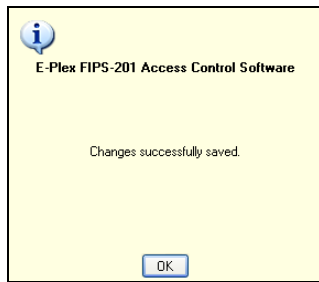


In the **Schedule Name** field, change the name of the schedule, if necessary.

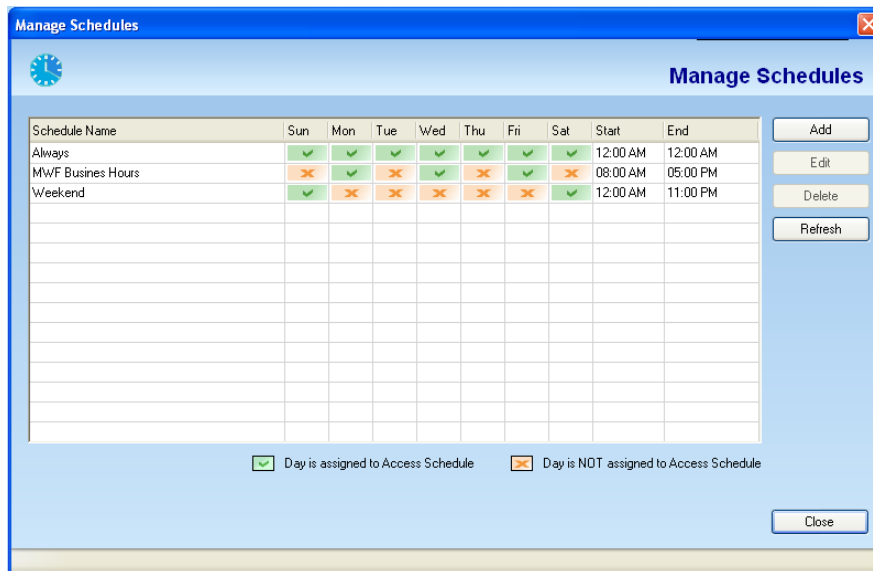
Select the appropriate check box for the day(s) you want to change in the schedule. These are the days that users will have access to a door.

In the **Start Time** field, change the start time, if necessary. This is the time that access begins each day.

In the **End Time** field, change the end time, if necessary. This is the time that access ends each day. Click **Save**. The software displays a **Changes Successfully Saved** message.



The system displays the updated schedule in the **Manage Schedules** window.



**Note:** You should update your locks if you modified any existing Access Schedules in those lock by transferring the changes to the M-Unit and programming/uploading the changed information to the locks. For more information, refer to **M-Unit Handheld** in Chapter 5, **Programming and Auditing Locks**.

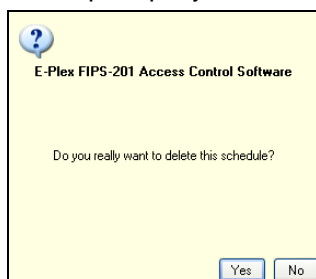
## Deleting a Schedule

Complete the following steps to delete access schedules.

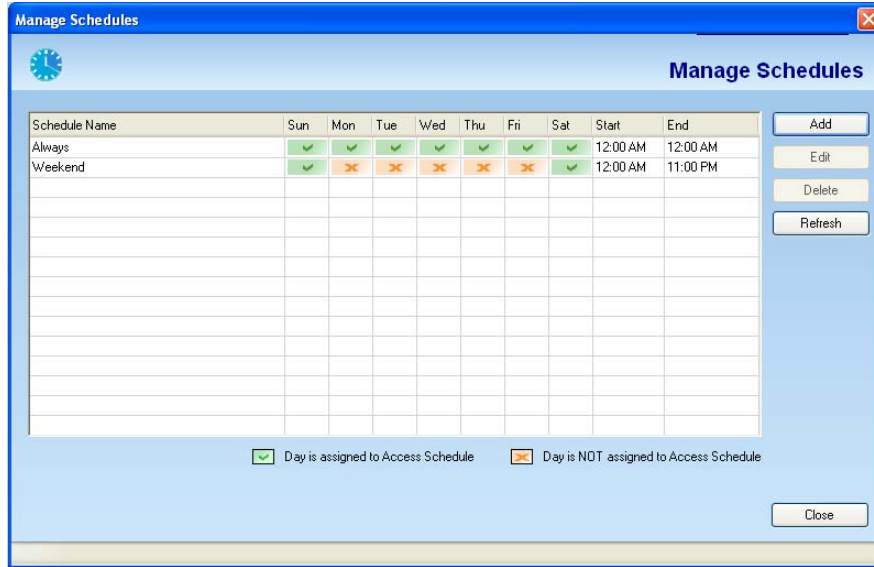
**Note:** You cannot delete an access schedule if it is assigned to a door.

- From the **Manage Schedules** window, click the access schedule you want to delete.

Click **Delete**. The software prompts you for confirmation.



- Click **Yes** to confirm the deletion. The system deletes the schedule from the database and returns to the **Manage Schedules** window.



# Managing Holidays/Vacations

---

A holiday/vacation is a defined time period during which users will NOT be granted access to a door. By default, there will be no access allowed to a door/lock during a defined Holiday/Vacation period, except for Service Users and any assigned “privileged” users in the system. By default, all Manager users have the privilege to override Holidays/Vacations.

---

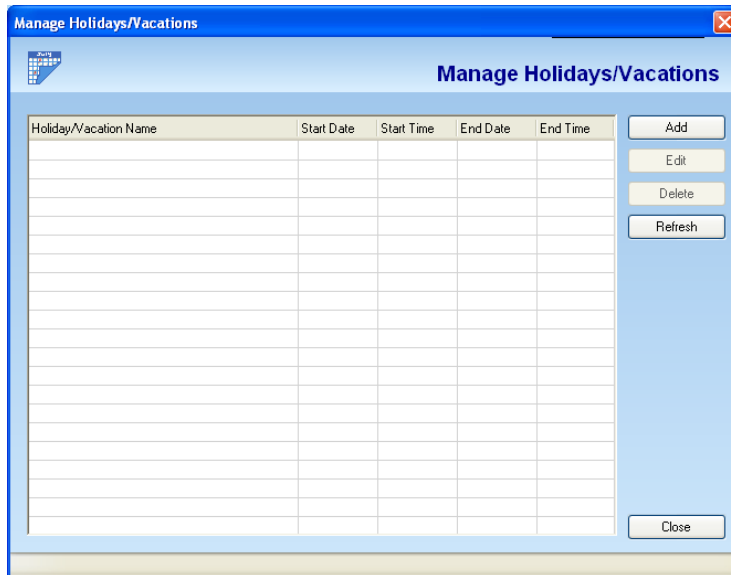
**Note:** You can define a maximum of 32 holiday/vacation periods in the lock but any number of them in the software.

---

To manage holidays/vacations, select **Manage Holidays/Vacations** from the **Holidays/Vacations** menu or click the **Manage Holidays/Vacations** button.



The software displays the **Manage Holidays/Vacations** window.



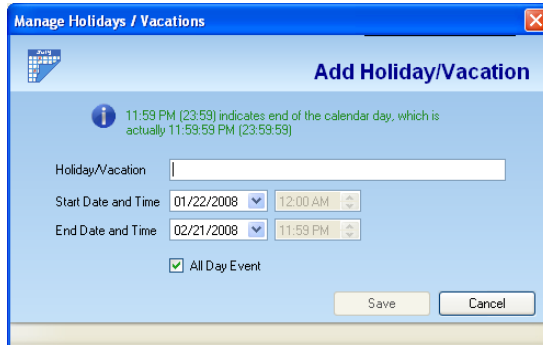
From this window, you can add, edit, or delete holidays or vacations.



## Adding a Holiday/Vacation

Complete the following steps to add a holiday/vacation.

- From the **Manage Holidays/Vacations** window, click **Add**. The software displays the **Add Holiday/Vacation** window.



In the **Holiday/Vacation** name field, type the name of the holiday or vacation you are adding.

---

**Note:** A holiday or vacation name can be a maximum of 16 characters and may include special characters and spaces.

---

Leave the **All Day Event** check box selected if you want a 24-hour period holiday, like New Year's Day. Uncheck the box if the holiday or vacation you are entering is a block of consecutive vacation days with specific start/end dates and times.

---

**Note:** The **All Day Event** check box is selected by default.

---

In the **Start Date** field, select the start date by using the drop-down arrow.

---

**Note:** 12:00 AM indicates midnight or the start of the calendar day.

---

In the **Start Time** field, select a start time by using the up and down arrows.

---

**Note:** The **Start Time** field will be grayed out if the **All Day Event** check box is selected.

---

In the **End Date** field, select the end date by using the drop-down arrow.

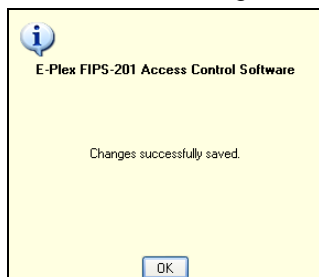
In the **End Time** field, select an end time by using the up and down arrows.

---

**Note:** The **End Time** field will be grayed out if the **All Day Event** check box is selected.

---

Click **Save**. The system saves the changes and displays a confirmation message.



The system displays the new holiday or vacation name in the **Manage Holidays/Vacations** window.

Holiday/Vacation Name	Start Date	Start Time	End Date	End Time
Christmas Holiday	12/24/2008	12:00 AM	12/25/2008	11:59 PM

---

**Note:** You can add additional holidays or vacations at any time.

---

## Editing a Holiday/Vacation

Complete the following steps to edit a holiday/vacation.

- From the **Manage Holidays/Vacations** window, select the holiday or vacation you want to edit.

Click **Edit**. The software displays the **Edit Holiday/Vacation** window.

11:59 PM (23:59) indicates end of the calendar day, which is actually 11:59:59 PM (23:59:59)

Holiday/Vacation:

Start Date and Time: 03/22/2008 12:00 AM

End Date and Time: 03/30/2008 11:59 PM

All Day Event

Save Cancel

In the **Holiday/Vacation** name field, change the name of the holiday or vacation, if necessary.

Clear the **All Day Event** check box if the holiday or vacation you are changing is NOT an all day event (24 hours).

In the **Start Date** field, change the start date, if necessary, using the drop-down list and selecting the date from the calendar.

In the **Start Time** field, change the start time, if necessary, by using the up and down arrows.

---

**Note:** The **Start Time** field will be grayed out if the **All Day Event** check box is selected.

---

In the **End Date** field, change the end date, if necessary, using the drop-down arrow and selecting the date from the calendar.

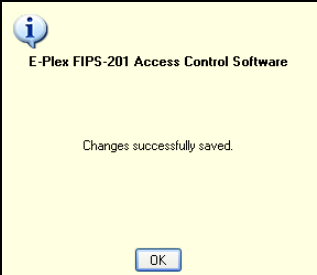
In the **End Time** field, change the end time, if necessary, by using the up and down arrows.

---

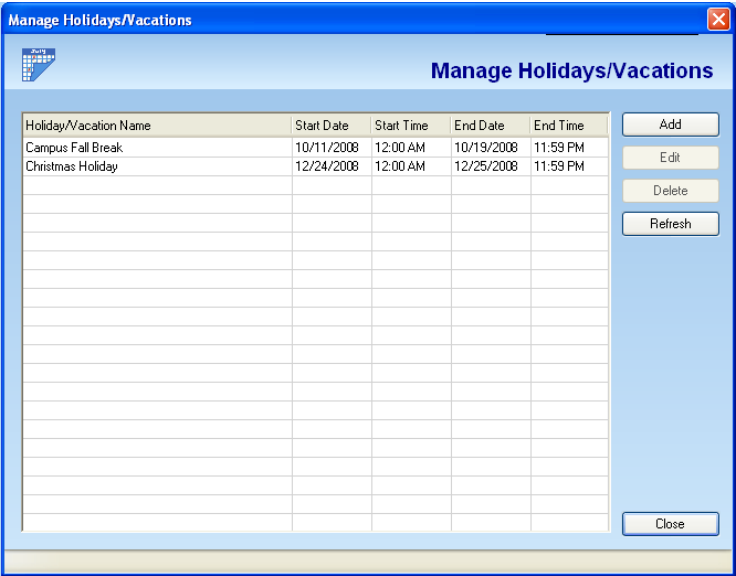
**Note:** The **End Time** field will be grayed out if the **All Day Event** check box is selected.

---

Click **Save**. The system saves the changes and displays a confirmation message.



Click **OK**. The system displays the updated **Manage Holidays/Vacation** window.



Click **Close** to exit the **Manage Holidays/Vacations** window.

---

**Note:** You should update your locks to reflect modified holidays/vacations by transferring the changed info to the M-Unit and uploading/programming the information to the locks. For more information, refer to **M-Unit Handheld** in Chapter 5, **Programming and Auditing Locks**.

---

# Deleting a Holiday/Vacation

Complete the following steps to delete a holiday/vacation.

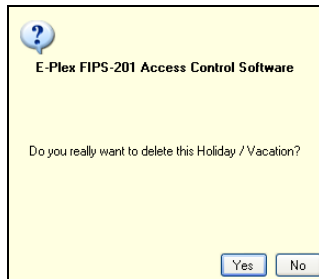
---

**Note:** *You cannot delete a holiday or vacation if it is assigned to a door.*

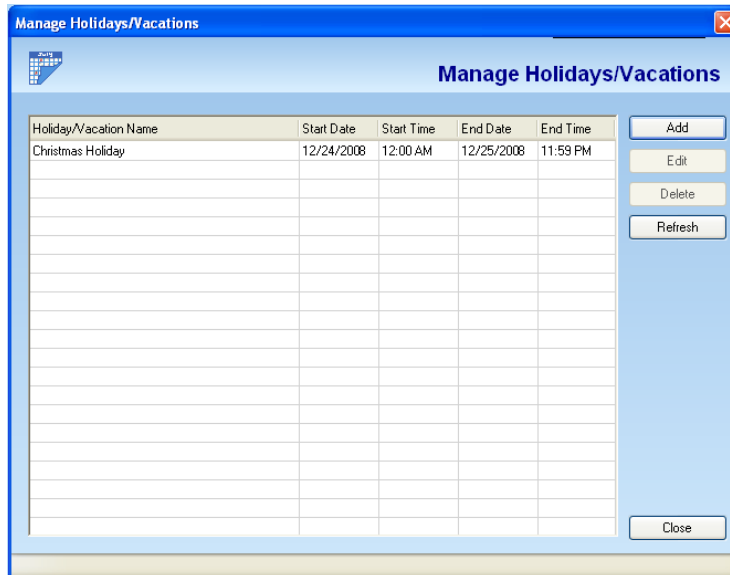
---

- From the **Manage Holidays/Vacations** window, select the holiday or vacation to delete.

Click **Delete**. The software prompts for confirmation.



Click **Yes** to confirm. The software displays the updated **Manage Holidays/Vacations** window.



Click **Close** to exit the **Manage Holidays/Vacations** window.

# Managing Door Groups

---

Door groups provide a way to manage multiple doors at a site. The E-Plex FIPS-201 software allows Operators to group doors according to any criteria.

For example, your site may be a small government office campus where you will be installing E-Plex 5800 locks in three different buildings. In this case, you can create three different door groups and name them Admin Bldg, Library and Supplies Depot. Or, you can create many door groups within one building like Staff Offices, Common Area and Storage Closets.

The E-Plex FIPS-201 software allows you to manage door groups from the **Door Groups** menu.

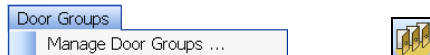
**Important:** When creating a new door group, you will be prompted to assign one (and only one) Door Group Manager for this door group. The DG Manager will have complete control over all the locks/doors belonging to this door group, i.e., the DG Manager will be just like the global Master, but for the doors belonging to her/his door group only.

---

**Note:** You can define any number of door groups in the database.

---

To manage door groups, select **Manage Door Groups** from the **Door Groups** menu, or click the **Manage Door Groups** button.



- The software displays the **Manage Door Groups** window. From this window, you can add, edit, or delete door groups. By default, there already exists a Door Group called "Default" belonging to a default Door Group Manager called "GlobalManager". You can edit the name of this Door Group (and this Manager's name under Users menu, shown later) to suit your site's needs.



## Adding a Door Group

- Complete the following steps to add a door group:

From the **Manage Door Groups** window, click **Add**. The software displays the **Add Door Group** window.

---

**Note 1 :** The door group name can be a maximum of 20 characters and may include special characters and spaces.

**Note 2:** When you create a new door group, you will be also creating various default parameter values of all the locks that will belong to this door group. However, these default lock parameters can be changed to suit individual door/lock requirement when you create the individual doors later.

---

In the **Door Group Name** field, type the name of the door group you are adding.

Select the (Single) **Door Group Manager** from the drop-down list. As stated earlier, you must assign one (and only one) Door Group Manager for this door group from any one of the available normal Manager users.

Click **Holidays/Vacations** to select the holidays and/or vacations to be applied to this door group. The software displays the **Assign Holidays/Vacations** window.

Select the appropriate holiday or vacation from the **Select Holiday/Vacation** drop-down list at the bottom of the window. The software displays the **Start Date**, **Start Time**, **End Date**, and **End Time**.

Click **Assign**. The system displays the holiday or vacation in the **Door Group Holidays/Vacations** area.

Click **OK**. The software returns to the **Add Door Group** window.

Adjust the following default lock parameters for all locks in this door group, as appropriate, using the up and down arrows:

- Unlock Time (secs)
- Buzzer Volume (0 = Off, 3 = Loudest)
- Tamper Count (# of tries)
- Tamper Shut Time (secs)

- Manual Passage Duration (hrs)

Select **Passage Mode Enabled** option, if you want your locks in this door group to be able to set the free passage option manually at the lock keypad.

---

**Note:** *The Passage Mode is automatically and permanently enabled for a lock with Residence Lock function and so this option will be grayed out if the lock function selected is Residence*

---

Select **Remote Unlock Enabled** option, if you need. **Note:** For this option to work, you must have an E-Plex 5800 lock that is electronically configured as such from the factory.

---

**Note:** *The Remote Unlock is automatically disabled for a lock with Residence lock function and so this option will be grayed out if the lock function selected is Residence.*

---

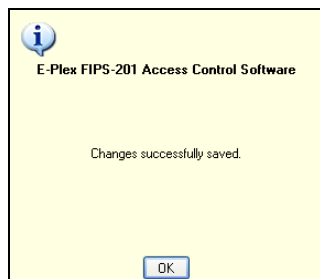
Select the **Lock Function** from the drop-down list – either Entry (default), Residence or Privacy.

---

**Note:** *For instructions on how to setup a Lock Function in an actual E-Plex 5800 lock and what each Lock Function means, please refer to the “E-Plex 5x00 Lock Function Setup Guide” that came with the lock in the lock box. By default, all locks come out of the factory whose lock function is pre-configured as “Entry”.*

---

- Click **Save**. The system saves the changes and displays a confirmation message.



Click **OK**. The software displays the updated **Manage Door Groups** window.




---

**Note:** *You can add additional door groups at any time.*

---



## Editing a Door Group

Complete the following steps to edit a door group:

- From the **Manage Door Groups** window, select a door group to edit.
- Click **Edit**. The software displays the **Edit Door Group** window.

Manage Door Groups

**Edit Door Group**

Door Group Name: DG-Technical Holidays/Vacations

Default Lock Model: E-Plex 5800

Door Group Manager: Lessard, Mitchell

**Default Lock Parameters**

Unlock Time (secs): 2

Buzzer Volume (0 = Off, 3 = Loud): 1

Tamper Count (# of tries): 4

Tamper Shut Time (secs): 30

Manual Passage Duration (hrs): 4

Passage Mode Enabled:

Remote Unlock Enabled:

**Default Lock Function**

Entry Lock

**Possible Lock Configurations:**

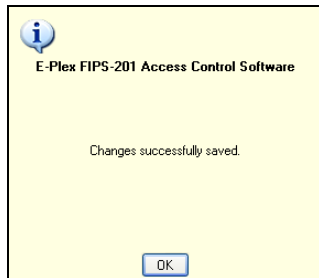
- Cylindrical without Privacy Thumbturn
- Exit Trim
- Mortise without Privacy Deadbolt
- SAC (Standalone Access Controller)

Number of assigned doors: 1

Save Cancel

Edit any or all required fields that you want changed.

- Click **Save**. The system saves the changes and displays a confirmation message.



Click **OK**. The software displays the updated **Manage Door Groups** window.

Manage Door Groups

Door Group	Manager
Staff Offices	Tiffany, Davis
Storage Closets	Henson, Jackie

Add

Edit

Delete

Refresh

Single Manager Assignment to all Door Groups

Assign Single Manager User

Close

---

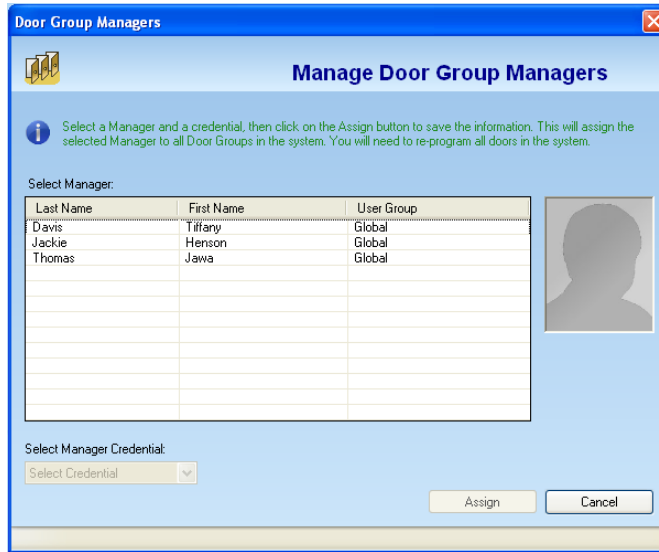
**Note:** You should update your locks whose parameters have been modified, first by downloading the affected locks' configuration data to the M-Unit and then programming /uploading this information to the locks.

---

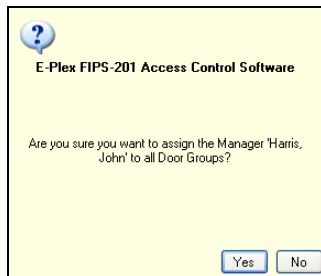
## Managing Door Group Managers

Complete the following steps to manage door group managers:

- From the **Manage Door Groups** window, click **Assign Single Manager User**. That is, here you can select (or change) and assign one (only) Door Group Manager user from a pool of previously created regular Manager users in the User profile menu of the software as this Door Group's (single/global) Manager. The software displays the **Manage Door Group Managers** window.



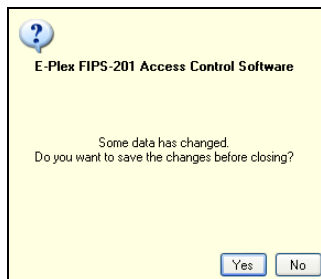
Select an existing Manager User from the list to become this door group's DG Manager. Click **Assign**. The software prompts you for confirmation.



Click **Yes**. The software displays the updated **Manage Door Group Manager** window.



Click **Close** to exit from this dialog.



Click **Yes** to save changes.

## Deleting a Door Group

Complete the following steps to delete a door group:

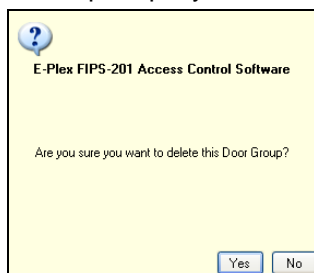
---

**Note:** You cannot delete a door group if it contains locks/doors within this group and the doors have users assigned to them. You must first unassign all users from these doors and then delete all these doors from this door group. Only after this will you be able to delete this door group from the database.

---

- From the **Manage Door Groups** window, select a door group to delete.

Click **Delete**. The software prompts you for confirmation.



Click **Yes**. The software displays the updated **Manage Door Groups** window.



Click **Close** to exit the **Manage Door Groups** window.

---

**Note:** You should update your locks to reflect modified door groups by programming the M-Unit and uploading the information to the locks. For more information, refer to **M-Unit Handheld** in Chapter 5, **Programming and Auditing Locks**.

---

# Managing Doors

In the E-Plex FIPS-201 software, doors are literally the physical doors at your site where E-Plex 5800 (PIN & Smart Card) locks are installed. You can define new doors, edit parameters of doors and delete existing doors from the database.

The E-Plex FIPS-201 software allows you to manage doors through the **Manage Doors** menu.

---

**Note:** You can define unlimited number of doors in the database.

---

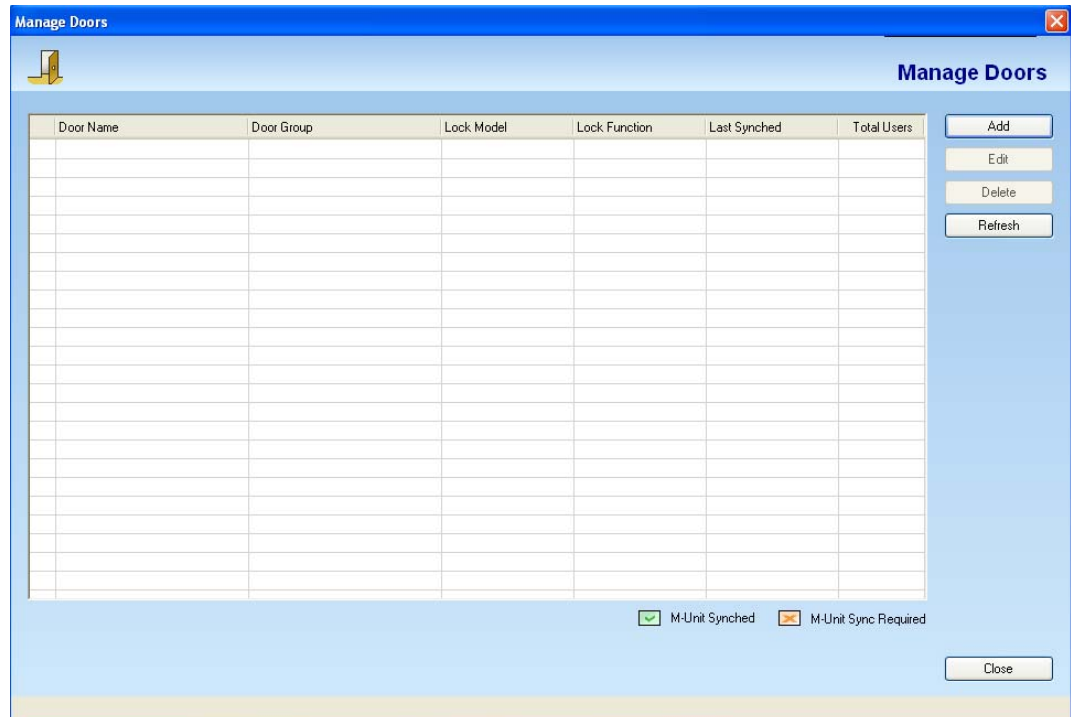
To manage doors, select **Manage Doors** from the **Door** menu, or click the **Manage Doors** button.



The system alerts you if there are no door groups in the system.



Click **OK**. The software displays the **Manage Doors** window.



## Adding a Door

Complete the following steps to add a door:

- From the **Manage Doors** window, click **Add**. The software displays the **Add Door**

window.

The screenshot shows the 'Manage Door Profile' window with the 'Add Door' tab selected. The window contains the following fields and options:

- Door Group:** A drop-down menu with the text 'Select Door Group'.
- Door Name:** A text input field.
- Lock Model:** A drop-down menu with 'E-Plex 5800' selected.
- Assurance Level:** A drop-down menu with 'Standard' selected.
- Holidays/Vacations:** Two radio buttons: 'Use Door Group Default Holidays' (selected) and 'Override Holidays for this door'. A 'Holidays/Vacations' button is to the right.
- Lock Parameters:** A section with several spinners and checkboxes:
  - Unlock Time (secs): 2
  - Buzzer Volume (0 = Off, 3 = Loud): 1
  - Tamper Count (# of tries): 4
  - Tamper Shut Time (secs): 30
  - Manual Passage Duration (hrs): 4
  - Passage Mode Enabled:
  - Remote Unlock Enabled:
- Lock Function Types:** A drop-down menu with 'Entry Lock' selected. Below it, a section titled 'Possible Lock Configurations:' lists:
  - Cylindrical without privacy
  - Exit Trim
  - Mortise without deadbolt
- Buttons:** 'Save' and 'Cancel' buttons at the bottom right.

Select a **Door Group** from the drop-down list.

**Note:** Depending on the door group name you selected here, all the default lock parameter values of this door will be exactly the same values as those in this door group since they are derived from this door group. However, you can change any or all lock parameter values for this door, if preferred.

In the **Door Name** field, type the door name.

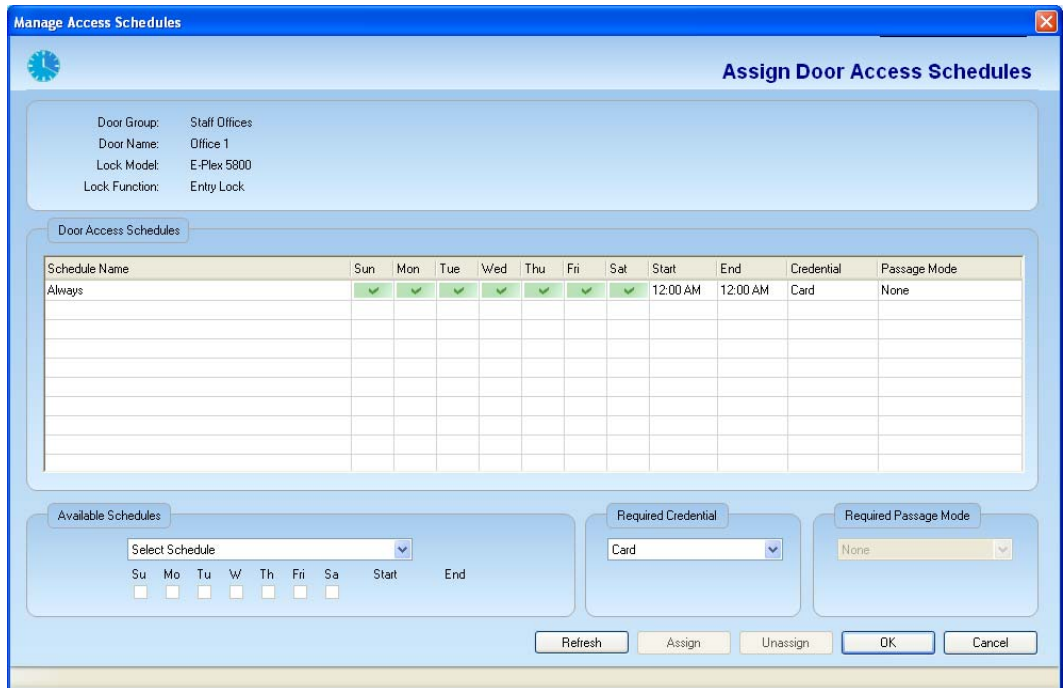
---

**Note:** A door name can be a maximum of 20 alphanumeric characters.

---

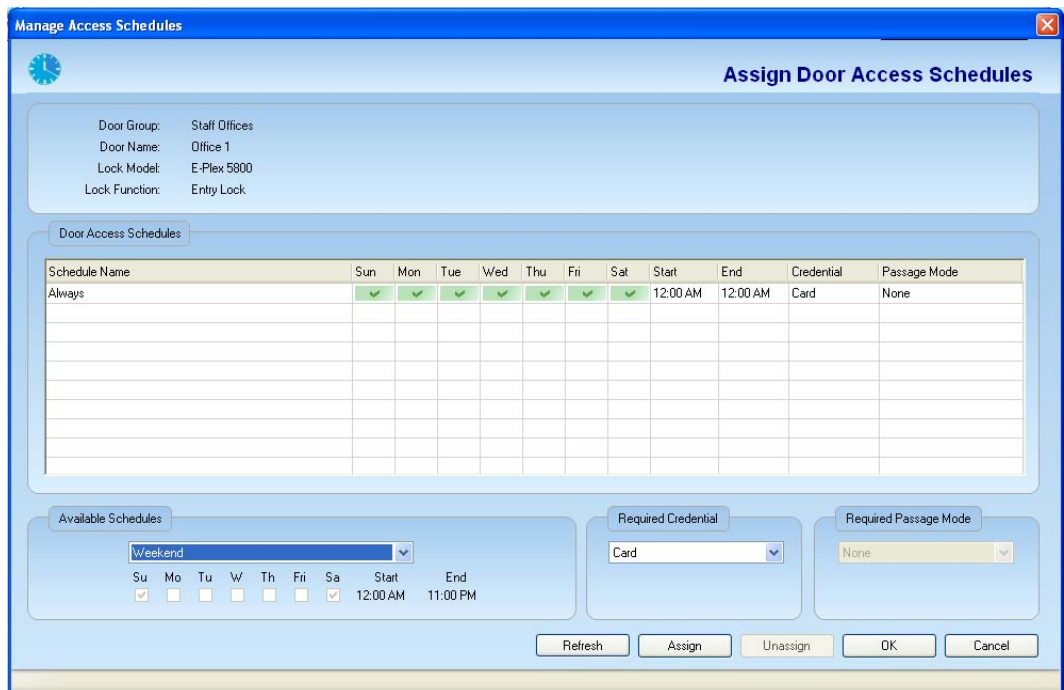
Select the **Assurance Level** for this door from the drop-down list. There are two Assurance levels – Standard (default) and High. If you assign High Assurance, then the lock will grant access to only the FIPS-201 card users who have the “High” Assurance level “status/guarantee” pre-encoded on their FIPS-201 cards.

Click **Access Schedules** to select the schedules that were previously created under the Manage Schedules menu for assigning them to this door during which time the lock will grant access to valid users. The software displays the **Assign Door Access Schedules** window.



Select an **Available Schedules** from the drop-down list at the bottom of the window. The software displays the schedules in the **Door Access Schedules** pane.

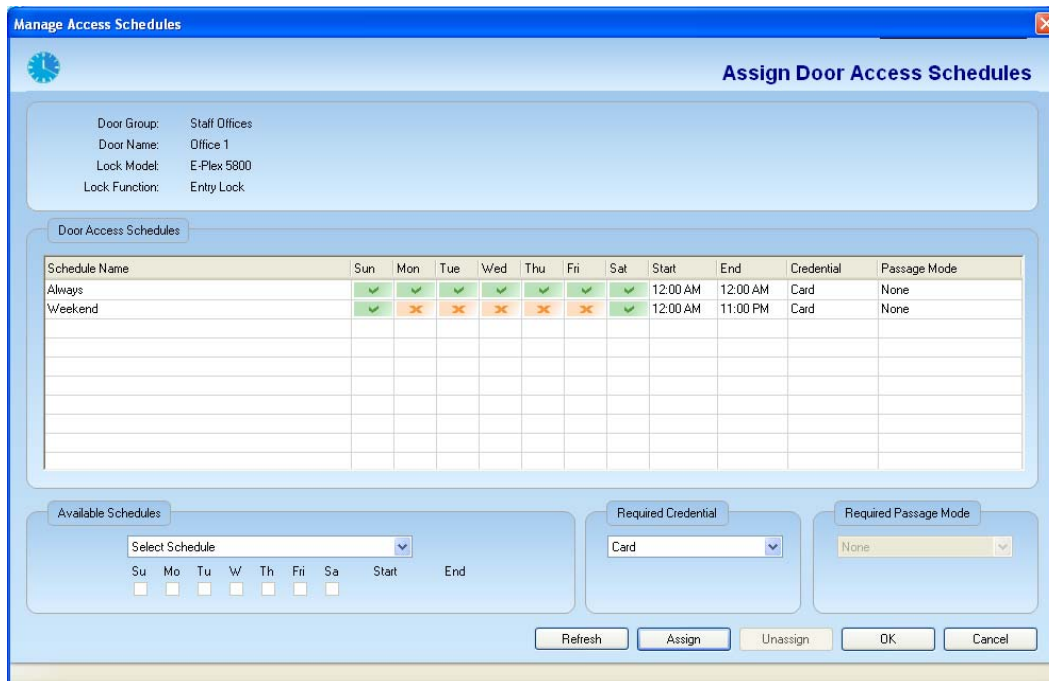
**Note:** Once a schedule is highlighted, the **Available Schedules** area becomes grayed out.



Select the **Required Credential** – Card access or PIN & Card access during this selected schedule from the drop-down list.

Select one of the four **Required Passage Mode** options from the drop down list, either (i) None – ie., the lock never grants free passage, (ii) Automatic – ie., the lock automatically enters free passage at the start of this schedule and locks back at the end of the schedule automatically, (iii) First Authorized Passage – ie., the lock goes into free passage only after a valid user opens it with her/his credential at or after the start of this schedule or (iv) Manual – ie., only the Master or the Manager users can manually set/reset the free passage at the lock keypad between the start and end times of this schedule for the Manual Passage mode duration set in the software.

Click **Assign**. The software displays the assigned schedule in the **Door Access Schedules** pane.




---

**Note:** After a schedule is assigned to the door, the drop-down lists return to their default settings.

---

Click **OK**. The system displays the **Edit Door** window.

Select the appropriate **Holidays/Vacations** settings:

- **Use Door Group Default Holidays**, if you are happy with the holiday setting previously set under the Manage Door Groups menu where this lock belongs.
- **Override Holidays for this door**, if you want to change the previously setup holiday settings under the Manage Door Group menu.

---

**Note:** When **Use Door Group Default Holidays** is selected, the **Holidays/Vacations** button is grayed out.

---





Select the appropriate holiday or vacation period from the **Holiday/Vacation Selection** drop-down list at the bottom of the window. The software displays the **Start Date**, **Start Time**, **End Date**, and **End Time**.

Click **Assign**. The system displays the holiday or vacation in the **Door Holidays/Vacations** area.

Click **OK**. The software displays the **Add Door** window.

- Adjust the following default parameters, as appropriate, using the up and down arrows:
  - Unlock Time (secs)
  - Buzzer Volume (0 = Off, 3 = Loudest)
  - Tamper Count (# of tries)
  - Tamper Shut Time (secs)

---

**Note:** The available Tamper Shut Time values range between 0 and 90 seconds. Zero means the lock will never go into a tamper shutdown mode; the default is 30 seconds.

---

- Manual Passage Duration (hrs)

Select **Passage Mode Enabled**, and enable it, if you required free passage in this lock.

Select **Remote Unlock Enabled**, and enable it, if you have this option in the lock hardware.

Select one of the three **Lock Function Types** from the drop-down list.

---

**Note:** For each lock function, a different possible lock configuration(s) will be displayed.

---

The software notifies you about the change.



Click **OK**.

---

**Note:** Refer to the separate “E-Plex 5X00 Lock Function Setup Guide” for instructions on changing to the desired BHMA lock function.

---

- Click **Save**. The system saves the changes and displays a confirmation message.



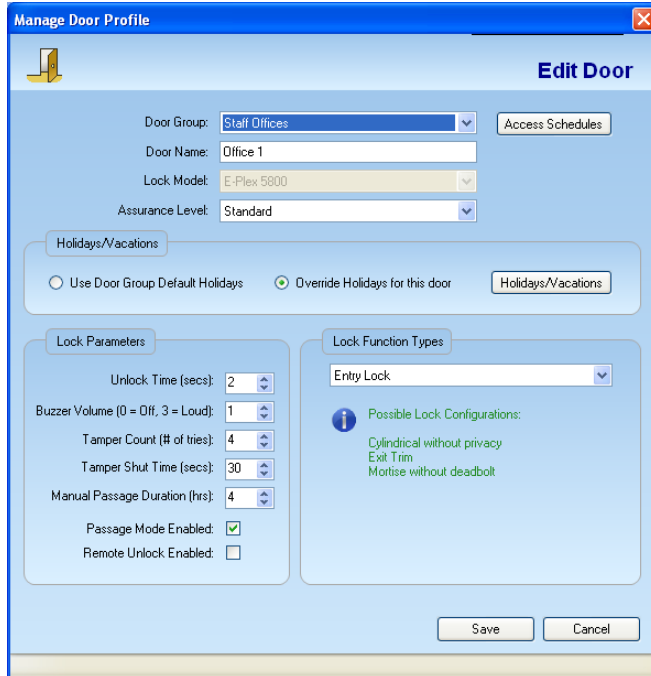


## Editing a Door

Complete the following steps to edit a door:

- From the **Manage Doors** window, select a door to edit.

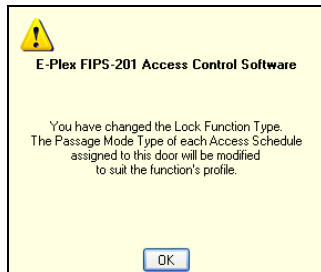
Click **Edit**. The software displays the **Edit Door** window.



Select a different **Door Group** from the drop-down list, if appropriate.

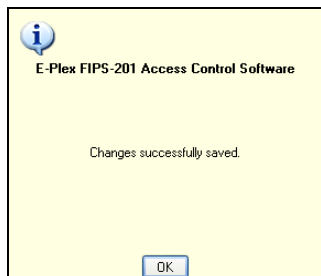
Edit any or all required fields that you want changed.

The software notifies you about the change.



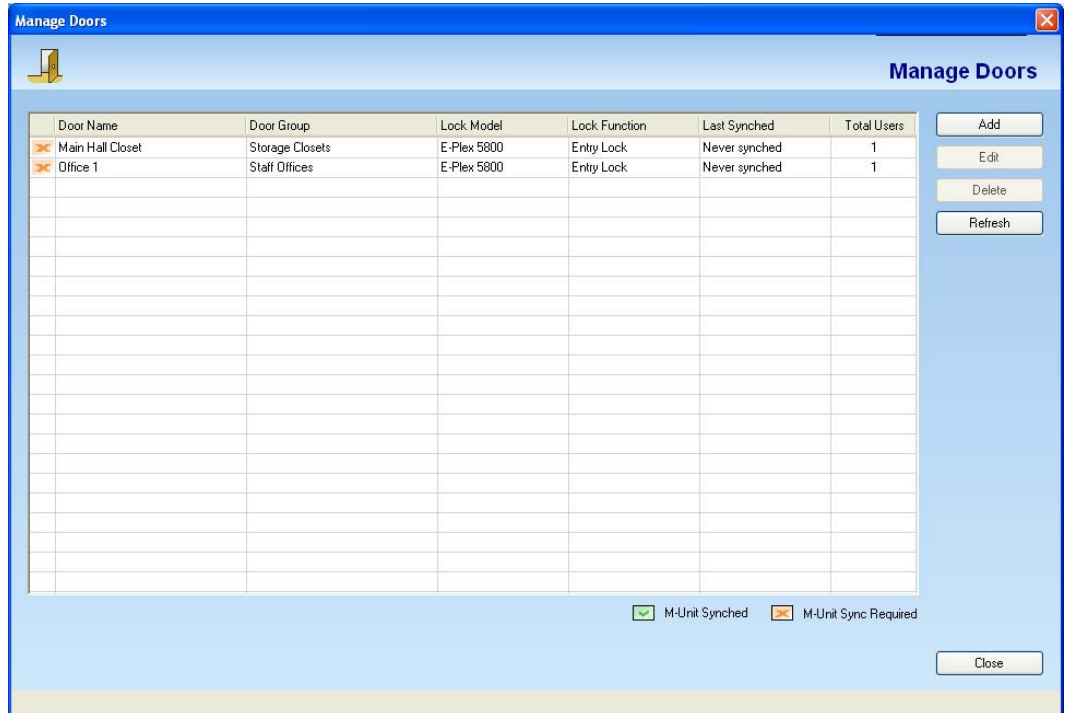
Click **OK**.

Click **Save**. The system saves the changes and displays a confirmation message.





Click **Yes**. The door is deleted and the software displays the updated **Manage Doors** window.



Click **Close** to exit the **Manage Doors** window and return to the Main Menu.

---

**Note:** You should update your locks to reflect modified door groups by programming the M-Unit and uploading the information to the locks. For more information, refer to **M-Unit Handheld** in Chapter 5, **Programming and Auditing Locks**.

---

# Managing Access Groups

In the E-Plex FIPS-201 software, you can group a bunch of doors with their own schedules and credential access types (ie, card only or PIN & card) etc in an Access Group. This makes it extremely efficient when you need to add a new employee/user in the system, as shown in one of the following chapters under “Managing Users” dialog menu – ie., with one selection in the menu dialog you can assign access rights to this new user in all those various doors contained in one access group.

---

**Note:** You can assign any number of access groups in the software.

---

To manage access groups, select **Manage Access Groups** from the **Access Groups** menu or click the **Manage Access Groups** button.

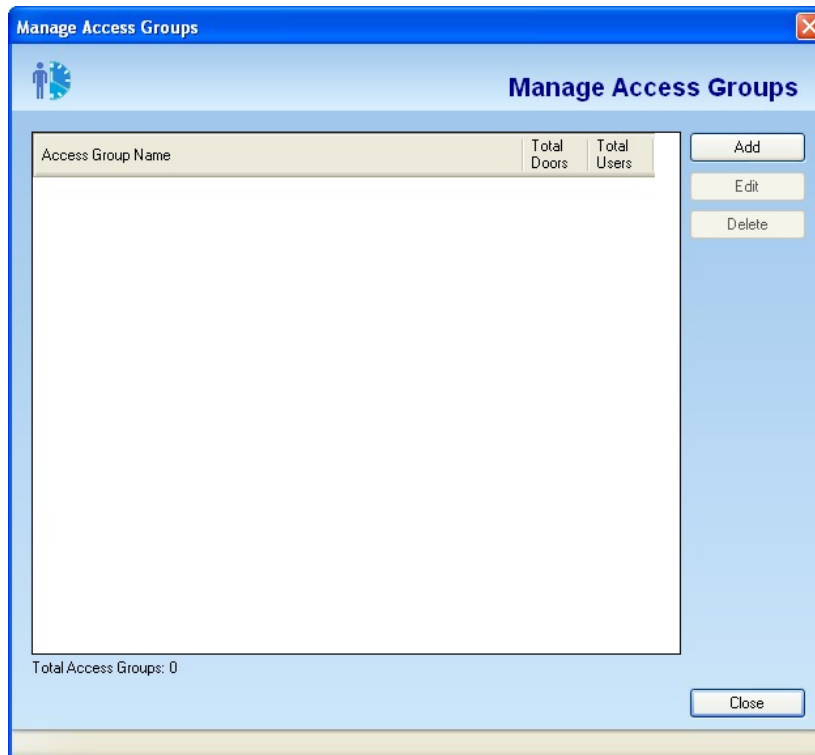


The software displays the **Manage Access Groups** window.

## Adding an Access Group

Complete the following steps to add an access group:

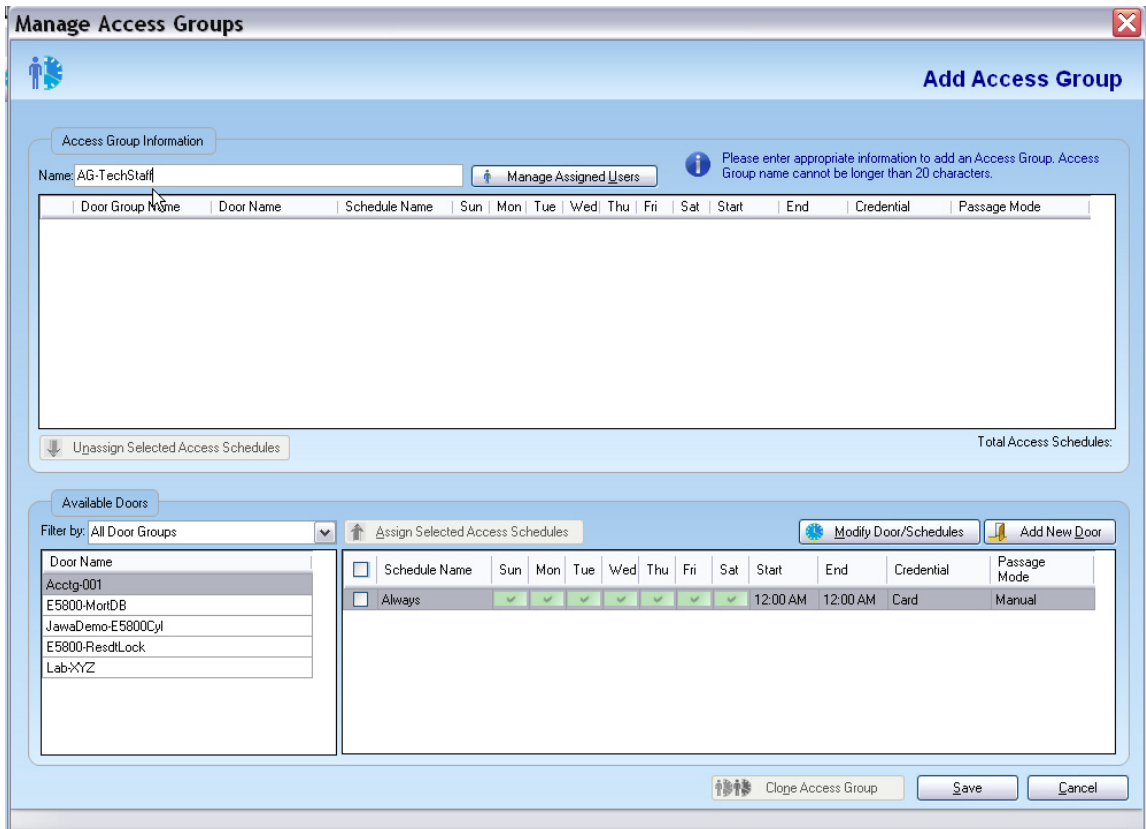
- From the **Manage Access Groups** window, click **Add**.



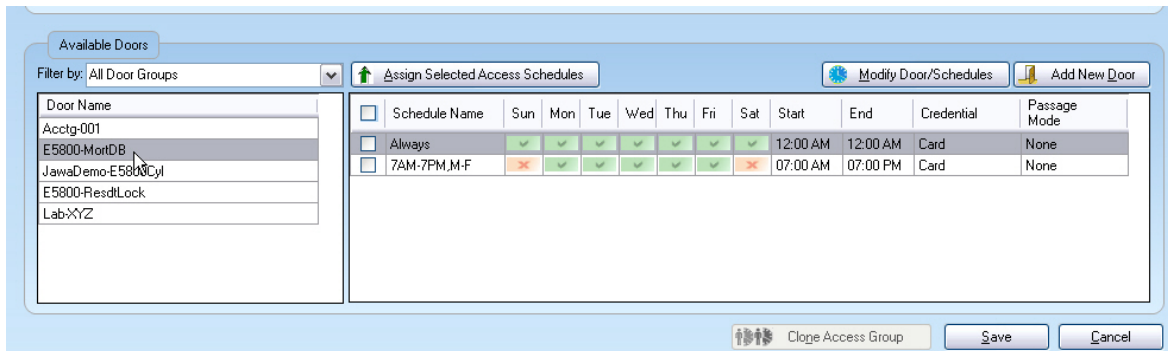
- The software displays the **Add Access Group** window.
- At the top left panel of the screen, enter the name of this new access group (of doors with access schedules and credential types) you are going to create; Eg: AG-TechStaff.



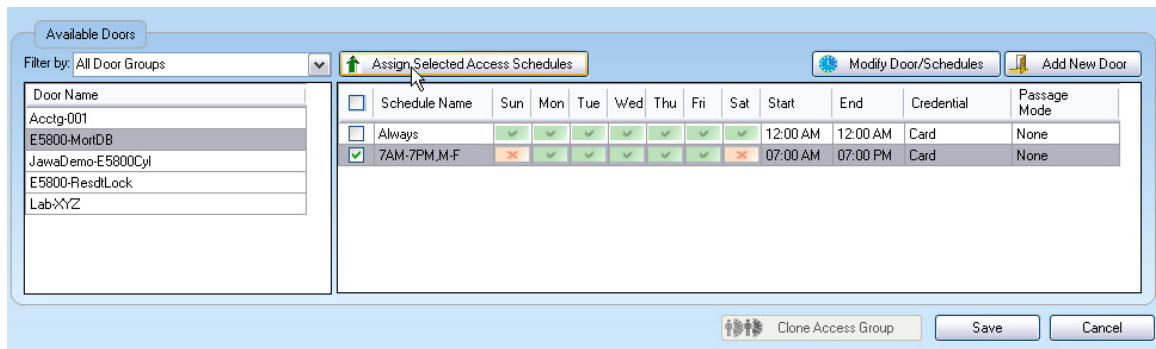
- The bottom half panel of the screen shows all available doors that can be assigned to this access group.



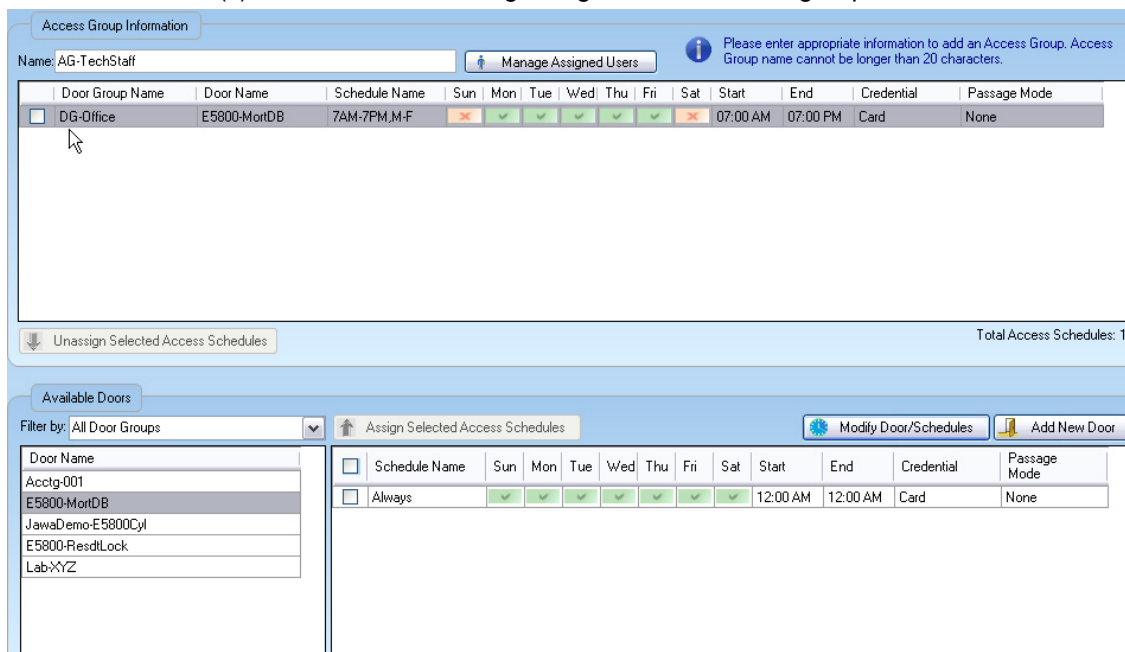
- Select one door at a time; for the selected door on the right side, you will see the access schedules and credential types that have been already assigned to this door, earlier.



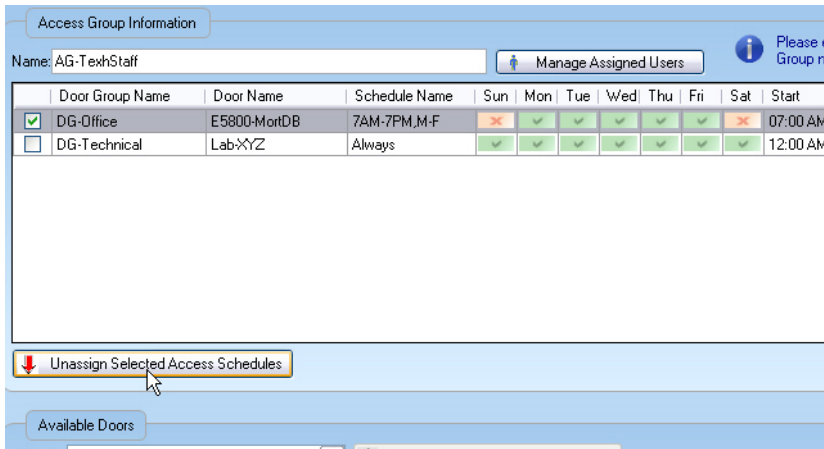
- Select the required access schedule(s) for this door by checking the box(es) against it/them and click on **Assign Selected Access Schedules** tab.



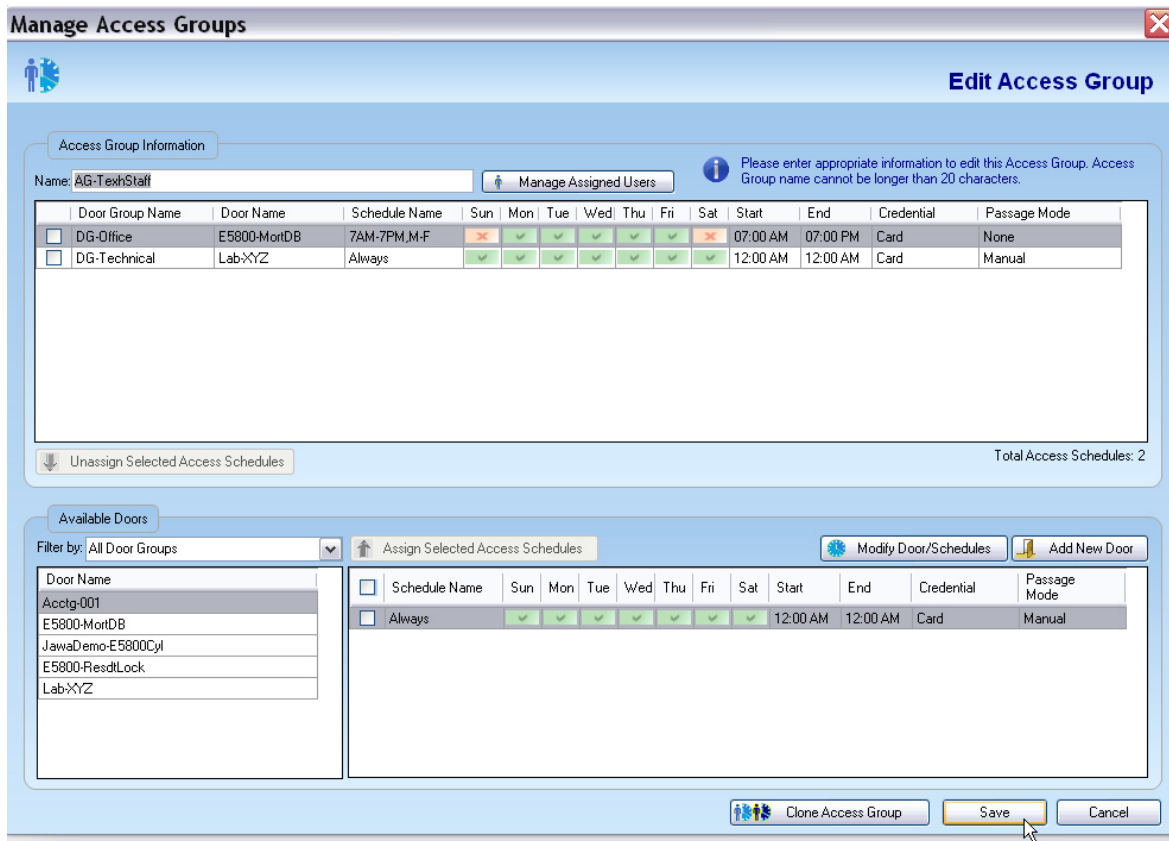
- You will see that this selected door (E5800-MortDB, in this example) with all its parameters is assigned to this access group, as shown at the top left panel.
- Repeat the process by selecting other doors, one at a time to assign them in this access group. If a door has more than access schedule assigned to it, you can select this door again and select a different schedule(s) for this door and assign it again to the access group.



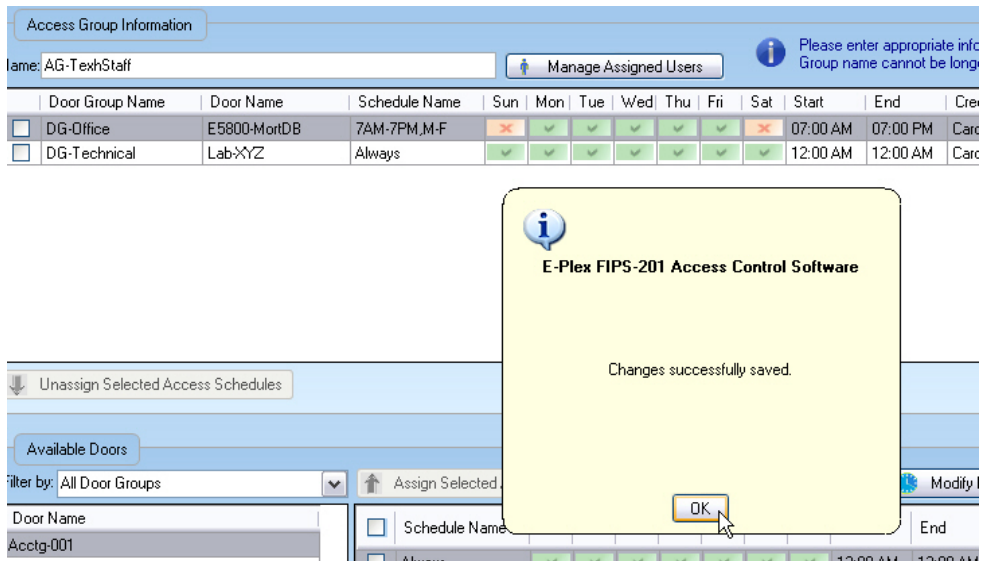
- If you want to un-assign a previously assigned door or doors from this access group, simply check against that box or boxes and click on **Unassign selected Access Schedules**; now these doors will be removed from this access group.



- Finally click **Save** and all the doors with their access schedules and credential types assigned to this access group will be saved in the database.



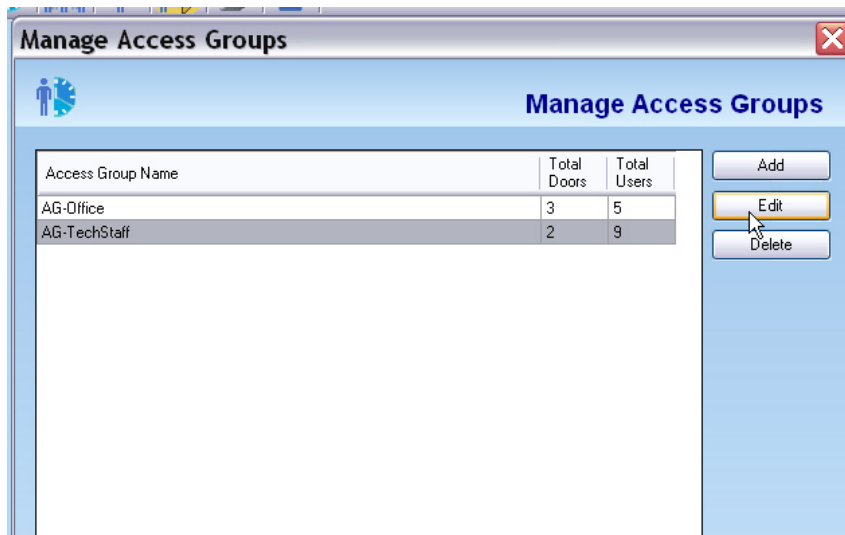
- Click **OK** to continue.



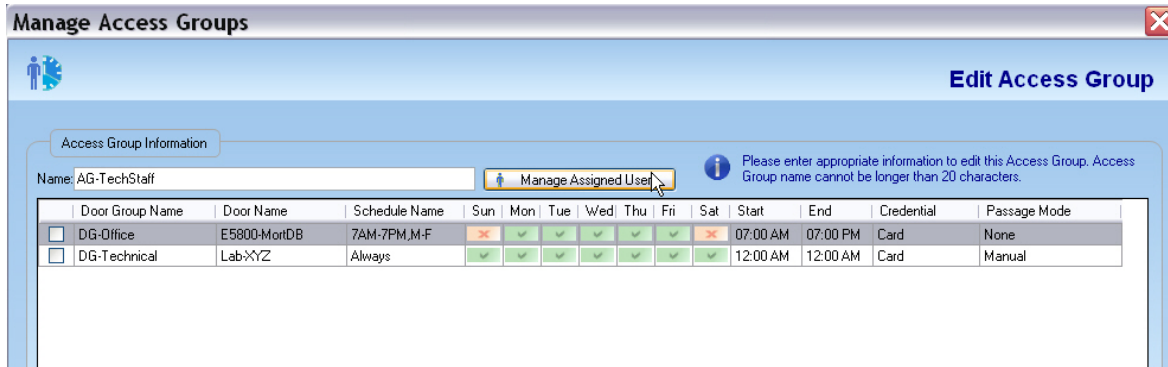
## Editing an Access Group

Complete the following steps to edit an access group:

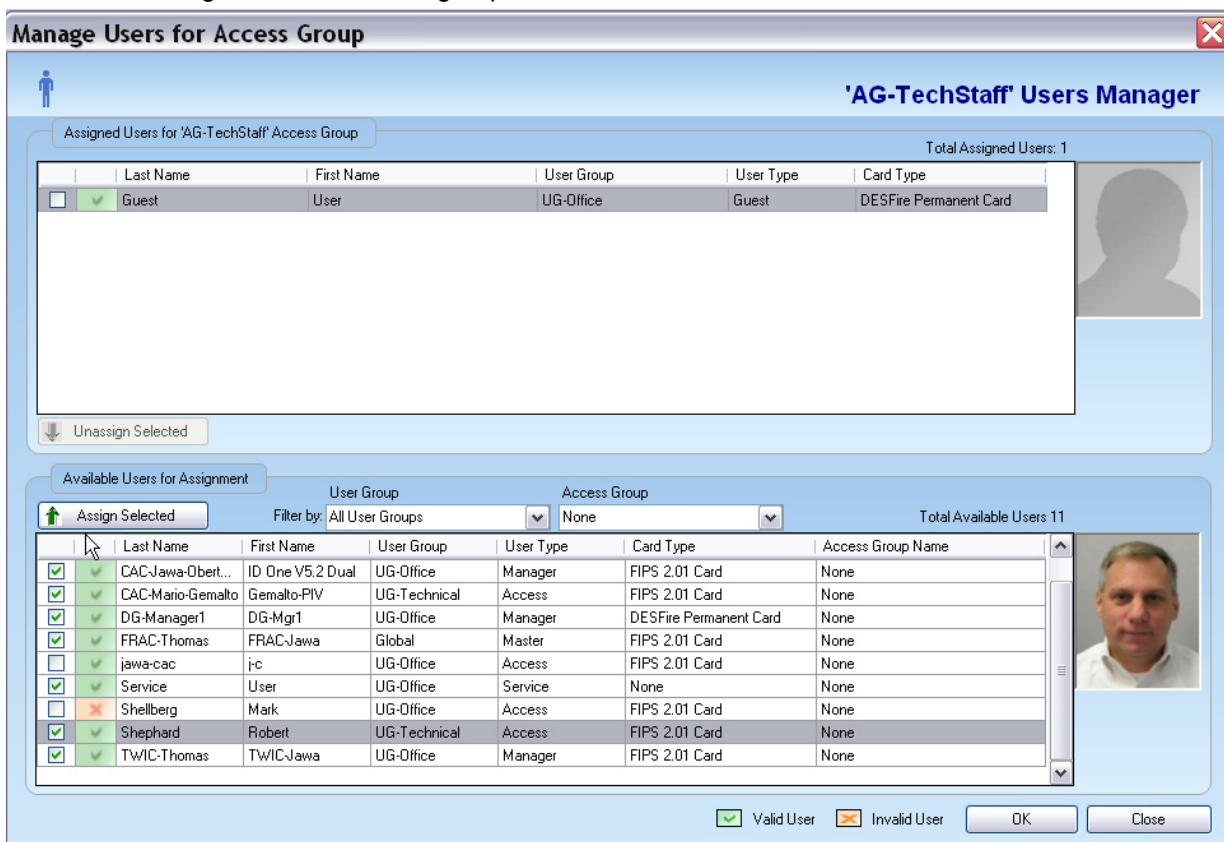
- From the **Manage Access Groups** window, select an access group to edit.
- Click **Edit**. The software displays the **Edit Access Groups** window.



- In addition to editing (adding or removing doors to access group), you can also assign users in the selected access group in this dialog menu. Click on **Manage Assigned Users** tab on top part of the screen panel.



- The following window will open up showing the available users in the system that can be selected and assigned to this access group as shown below.



- Select required users by checking the boxes against them and click on **Assign Selected** tab on the left side of the bottom panel. Now all the selected users will be assigned to this access group as shown on the top panel.

**Note:** By default in the Access Group menu, all users except the manager(s) do not have any “privileges”. However, any users in an Access Group can be assigned one or more of the privileges under a different menu -> the **Managing (Specific) Access Assignment** menu dialog, as described later in this chapter.

**Manage Users for Access Group** ✖

**'AG-TechStaff' Users Manager**

Assigned Users for 'AG-TechStaff' Access Group Total Assigned Users: 9

	Last Name	First Name	User Group	User Type	Card Type
<input type="checkbox"/>	Guest	User	UG-Office	Guest	DESFire Permanent Card
<input checked="" type="checkbox"/>	TWIC-Thomas	TWIC-Jawa	UG-Office	Manager	FIPS 2.01 Card
<input type="checkbox"/>	Shephard	Robert	UG-Technical	Access	FIPS 2.01 Card
<input checked="" type="checkbox"/>	Service	User	UG-Office	Service	None
<input checked="" type="checkbox"/>	FRAC-Thomas	FRAC-Jawa	Global	Master	FIPS 2.01 Card
<input type="checkbox"/>	DG-Manager1	DG-Mgr1	UG-Office	Manager	DESFire Permanent Card
<input checked="" type="checkbox"/>	CAC-Mario-Gemalto	Gemalto-PIV	UG-Technical	Access	FIPS 2.01 Card
<input checked="" type="checkbox"/>	CAC-Jawa-Oberthur	ID One V5.2 Dual	UG-Office	Manager	FIPS 2.01 Card
<input type="checkbox"/>	CAC-Giovanni-Oberthu	Oberthur-PIV	UG-Technical	Access	FIPS 2.01 Card

Available Users for Assignment Total Available Users: 3

Filter by: All User Groups Access Group: None

	Last Name	First Name	User Group	User Type	Card Type	Access Group Name
<input checked="" type="checkbox"/>	AccUser1-LName	AccUser1-FName	UG-Office	Access	DESFire Permanent Card	None
<input checked="" type="checkbox"/>	jawa-cac	j-c	UG-Office	Access	FIPS 2.01 Card	None
<input type="checkbox"/>	Shellberg	Mark	UG-Office	Access	FIPS 2.01 Card	None

Valid User   
  Invalid User   
    

Click **OK** and then **Save**.

**Manage Access Groups** Edit Access Group

Access Group Information

Name:  Manage Assigned Users

*Please enter appropriate information to edit this Access Group. Access Group name cannot be longer than 20 characters.*

Door Group Name	Door Name	Schedule Name	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Start	End	Credential	Passage Mode
<input type="checkbox"/> DG-Office	E5800-MortDB	7AM-7PM,M-F	✗	✓	✓	✓	✓	✓	✗	07:00 AM	07:00 PM	Card	None
<input type="checkbox"/> DG-Technical	Lab-XYZ	Always	✓	✓	✓	✓	✓	✓	✓	12:00 AM	12:00 AM	Card	Manual

Total Access Schedules: 2

Unassign Selected Access Schedules

---

Available Doors

Filter by:  Assign Selected Access Schedules Modify Door/Schedules Add New Door

Door Name	Schedule Name	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Start	End	Credential	Passage Mode
<input type="checkbox"/> Acctg-001												
<input type="checkbox"/> E5800-MortDB												
<input type="checkbox"/> JawaDemo-E5800Cyl												
<input type="checkbox"/> E5800-ResdtLock												
<input type="checkbox"/> Lab-XYZ												
<input type="checkbox"/> Always		✓	✓	✓	✓	✓	✓	✓	12:00 AM	12:00 AM	Card	Manual

Clone Access Group

- You may also “clone” an existing access group and give it a different name. After cloning, you can easily add or remove doors and/or users in the cloned access group to suit your need.
- Click on **Clone Access Group**.



Access Group Information

Name: AG-TechStaff Manage Assigned Users Please enter appropriate information to edit this Access Group. Access Group name cannot be longer than 20 characters.

Door Group Name	Door Name	Schedule Name	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Start	End	Credential	Passage Mode
<input type="checkbox"/> DG-Office	E5800-MortDB	7AM-7PM,M-F	✗	✓	✓	✓	✓	✓	✗	07:00 AM	07:00 PM	Card	None
<input type="checkbox"/> DG-Technical	Lab-XYZ	Always	✓	✓	✓	✓	✓	✓	✓	12:00 AM	12:00 AM	Card	Manual

Unassign Selected Access Schedules Total Access Schedules: 2

---

Available Doors

Filter by: All Door Groups Assign Selected Access Schedules Modify Door/Schedules Add New Door

Door Name	Schedule Name	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Start	End	Credential	Passage Mode
<input type="checkbox"/> Acctg-001												
<input type="checkbox"/> E5800-MortDB												
<input type="checkbox"/> JawaDemo-E5800Cyl												
<input type="checkbox"/> E5800-ResdtLock												
<input type="checkbox"/> Lab-XYZ												
<input type="checkbox"/> Always		✓	✓	✓	✓	✓	✓	✓	12:00 AM	12:00 AM	Card	Manual

Clone Access Group Save Cancel

- By default, the system will automatically name this cloned access group as “Clone of xxxxx” where xxxxx is the name of the access group that was cloned from. You can rename this to whatever name you want.
- Click **Save** to save this cloned access group in the database.

Access Group Information

Name: Clone of AG-TechStaff Manage Assigned Users Please enter appropriate information to edit this Access Group. Access Group name cannot be longer than 20 characters.

Door Group Name	Door Name	Schedule Name	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Start	End	Credential	Passage Mode
<input type="checkbox"/> DG-Office	E5800-MortDB	7AM-7PM,M-F	✗	✓	✓	✓	✓	✓	✗	07:00 AM	07:00 PM	Card	None
<input type="checkbox"/> DG-Technical	Lab-XYZ	Always	✓	✓	✓	✓	✓	✓	✓	12:00 AM	12:00 AM	Card	Manual

Unassign Selected Access Schedules Total Access Schedules: 2

**E-Plex FIPS-201 Access Control Software**

The name of the Cloned Access Group is 'Clone of AG-TechStaff'.

OK

---

Available Doors

Filter by: All Door Groups Assign Selected Access Schedules Modify Door/Schedules Add New Door

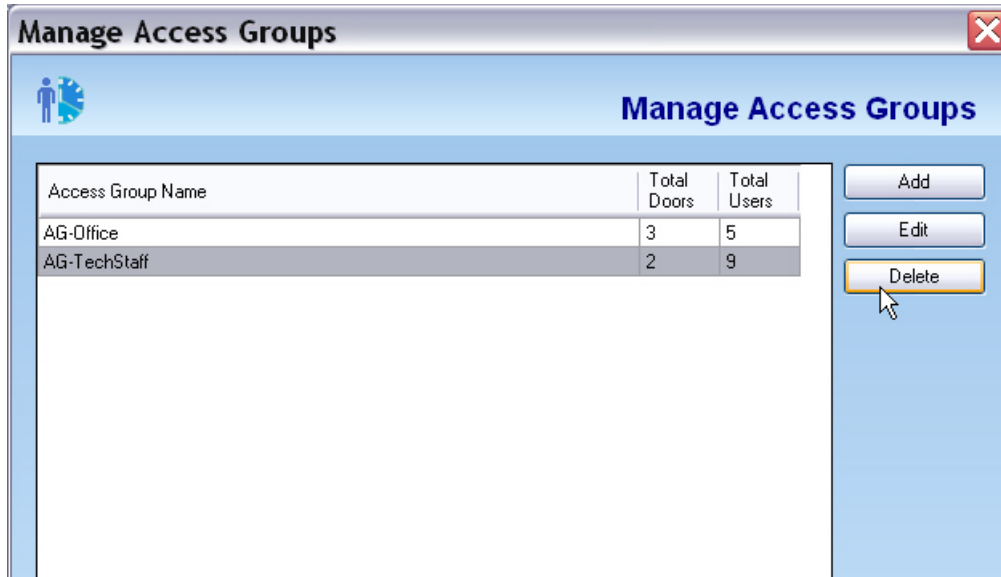
Door Name	Schedule Name	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Start	End	Credential	Passage Mode
<input type="checkbox"/> Acctg-001												
<input type="checkbox"/> E5800-MortDB												
<input type="checkbox"/> JawaDemo-E5800Cyl												
<input type="checkbox"/> E5800-ResdtLock												
<input type="checkbox"/> Lab-XYZ												
<input type="checkbox"/> Always		✓	✓	✓	✓	✓	✓	✓	12:00 AM	12:00 AM	Card	Manual

Clone Access Group Save Cancel

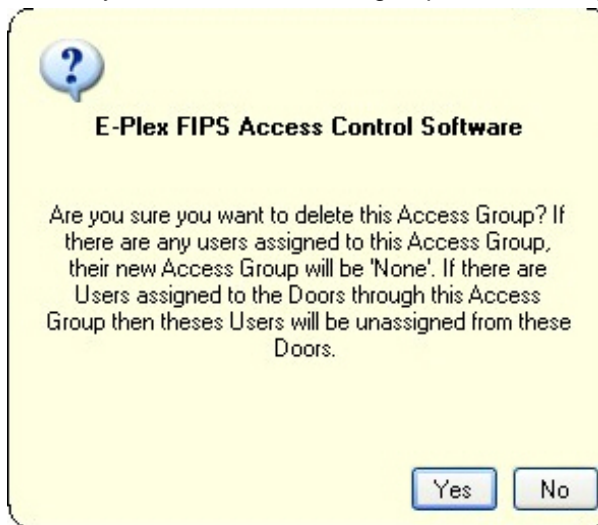
## Deleting an Access Group

Complete the following steps to delete an access group:

- From the **Manage Access Groups** window, select an access group to delete.
- Click **Delete**.



- The system displays the following screen with a message to caution you what will happen when you delete this access group. Click **Yes** if you really intended to delete this access group.



# Managing Departments

---

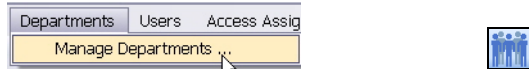
In the FIPS-201 software, you can group similar users into user groups like departments. For example, you may have a group of users who can be assigned to a Department called Office Staff. The Department assignment in the software is strictly for operator convenience and does not have any other effect in the functionality of the E5800 lock or the FIPS-201 system.

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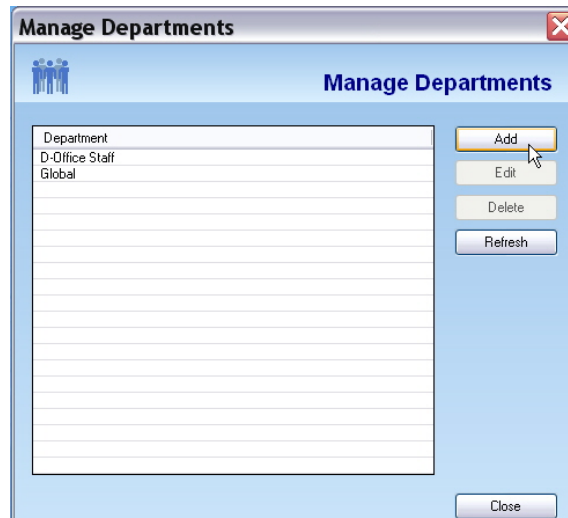
**Note:** You can assign any number of Departments in the database. The Department name called "Global" is pre-assigned in the system as a default Department. In the E-Plex FIPS-201 software version 1.x, the "Department" was called "User Group".

---

- To manage Departments, select **Manage Department** from the **Department** menu or click the **Manage Department** button. [Note: In FIPS-201, software version 1.x, the term "User Group" was used to refer to the "Department"; they both mean the same thing].



- The software displays the **Manage Departments** window.



- From this window, you can add, edit, or delete Departments.

## Adding a Department

Complete the following steps to add a user group:

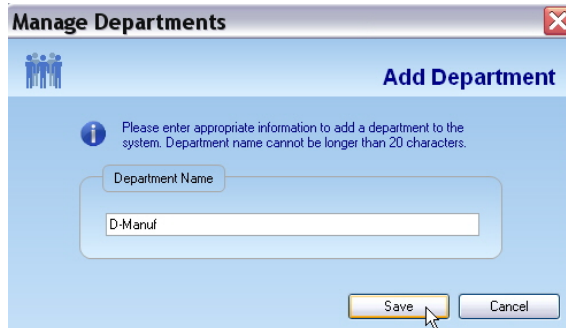
- From the **Manage Department** window, click **Add**. The software displays the **Add Department** window.

- In the **Department Name** field, type the name of the user group you are adding.

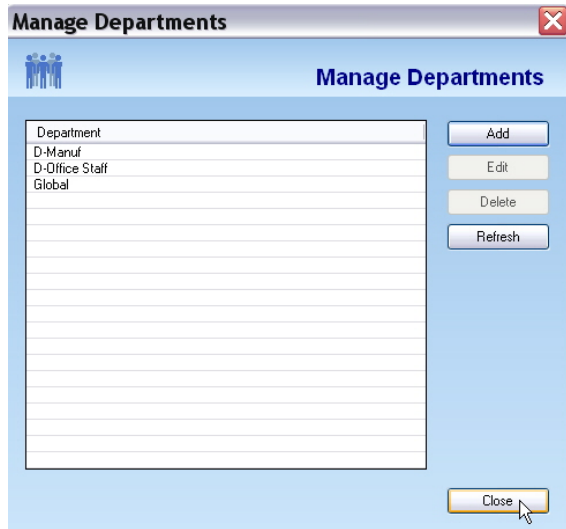
---

**Note:** The **Department Name** can be a maximum of 20 alphanumeric characters and no spaces and special characters are allowed, except for the “-“ character.

---



- Click **Save**. The system saves the changes and displays a confirmation message.
- Click **OK**. The software displays the new Department (user group) in the **Manage Department** window. Click **Close**.




---

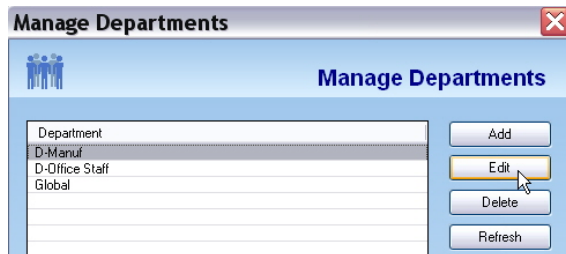
**Note:** You can add additional Departments at any time.

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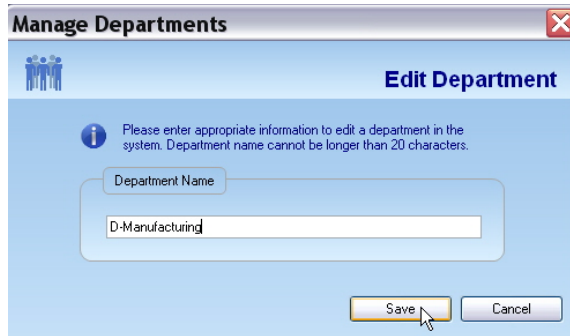
## Editing a Department

Complete the following steps to edit a user group.

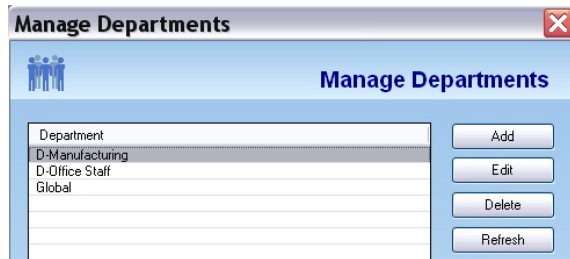
- From the **Manage Department** window, click a user group to edit.
- Click **Edit**. The software displays the **Edit Department** window.



- In the **Department Name** field, change the name of the user group.



- Click **Save**. The system saves the changes and displays a confirmation message.
- Click **OK**. The software displays the updated **Manage Department** window.

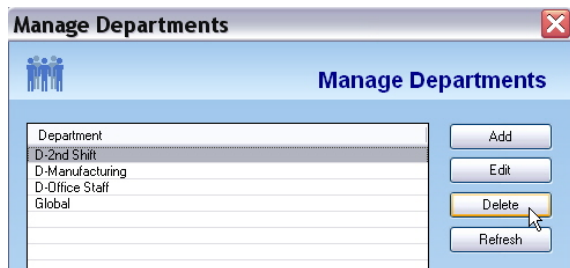


- Click **Close** to exit the **Manage Department** window.

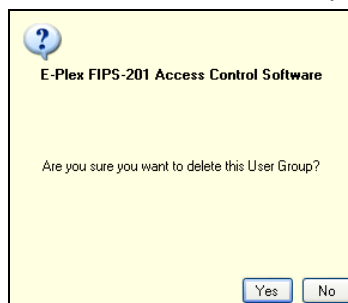
## Deleting a Department

Complete the following steps to delete a Department.

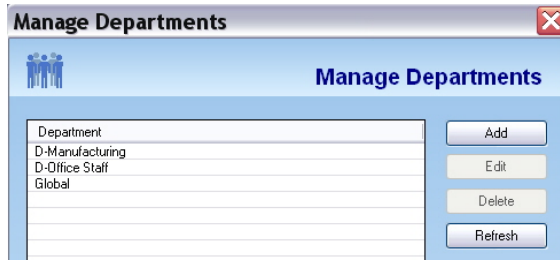
- From the **Manage Department** window, select and click a Department to delete. If a Department contains any users in it, you must first delete all these users before able to delete this Department.



- Click **Delete**. The software prompts you for confirmation.



- Click **Yes**. The system displays the updated **Manage Department** window. Click **Close**.



# Managing Users

In the E-Plex FIPS-201 software, you can add and maintain users and assign their associated Smart Cards. You can add new users, assign an access group and a Smart Card to each user, change user information, or delete existing users and the Smart Cards assigned to them.

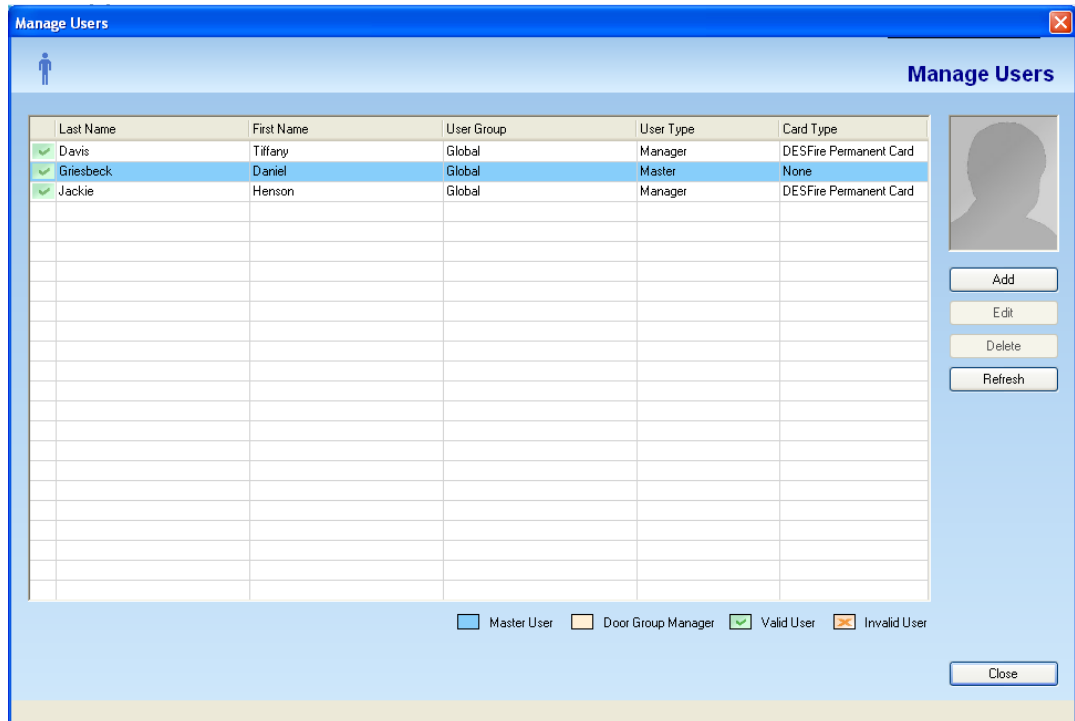
The E-Plex FIPS-201 software allows you to manage users from the **Manage Users** menu.

**Note:** You can define a maximum of 3,000 users in the lock but any number of them in the database.

To manage users, select **Manage Users** from the **Users** menu or click the **Manage Users** button.



The software displays the **Manage Users** window.



From this window, you can add, edit, or delete users, including enrolling a FIPS or DESFire ID badge to a user from either the “Add” or the “Edit” menu. .

**Important:** You must enroll and assign a card (FIPS or DESFire) to the Master from the “Add User” menu; otherwise the Master’s credential will not work in the lock after programming the lock with the M-Unit.

# Adding a User

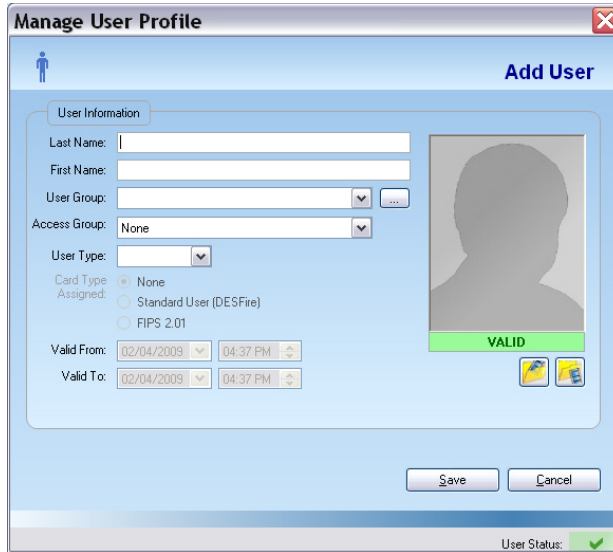
Complete the following steps to add a user:

---

**Note:** Ensure that the Smart Card enroller is properly connected to the PC before beginning this process.

---

- From the **Manage Users** window, click **Add**. The software displays the **Add User** window.



In the **Last Name** field, type the last name of the user.

In the **First Name** field, type the first name of the user.

From the **User Group** drop-down list, select a user group.

From the **User Type** drop-down list, select a user type.

---

**Note:** The **User Type** field defaults to *Access User*.

---

---

**Note:** Service user and M-Unit user types do not have the PIN & Card access option. M-Unit user can be Card only type but the Service user can be either Card only or PIN only type.

---

In the **User PIN** field, the user PIN for this user will be automatically generated by the software. You can override the PIN by entering a new 4-digit PIN or clicking the PIN Generator button.

From the **Access Group** drop-down list, select an access group, or leave it as default “None”.

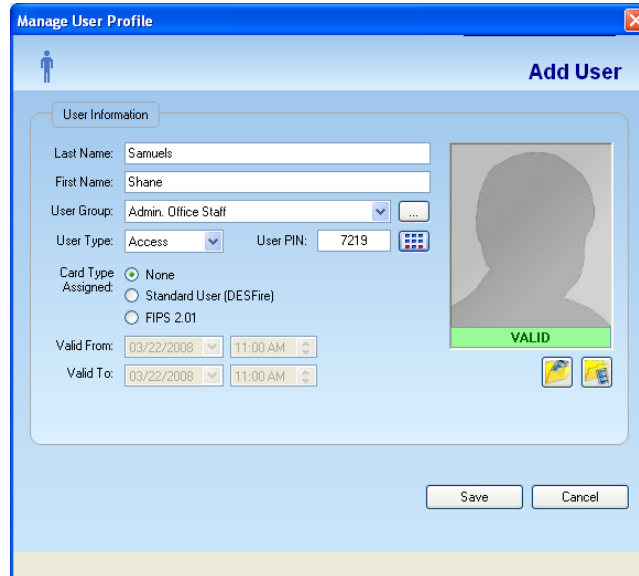


Select the appropriate card type to be assigned: **None**, **Standard User (DESFire)**, or **FIPS 2.01**.



## None

If you select **None** from the **Card Type Assigned** area, complete the following steps. You will not assign a Smart Card to the user: This is typically done when your user is not yet assigned a FIPS-201 smart card but you want to enroll her/him in the system database.



The screenshot shows the 'Manage User Profile' dialog box with the 'Add User' tab selected. The 'User Information' section contains the following fields:

- Last Name: Samuels
- First Name: Shane
- User Group: Admin. Office Staff
- User Type: Access
- User PIN: 7219
- Card Type Assigned:  None,  Standard User (DESFire),  FIPS 2.01
- Valid From: 03/22/2008 11:00 AM
- Valid To: 03/22/2008 11:00 AM

The 'Valid From' and 'Valid To' date and time drop-down lists are grayed out. A 'VALID' status is shown next to a placeholder image of a user. At the bottom, there are 'Save' and 'Cancel' buttons.

---

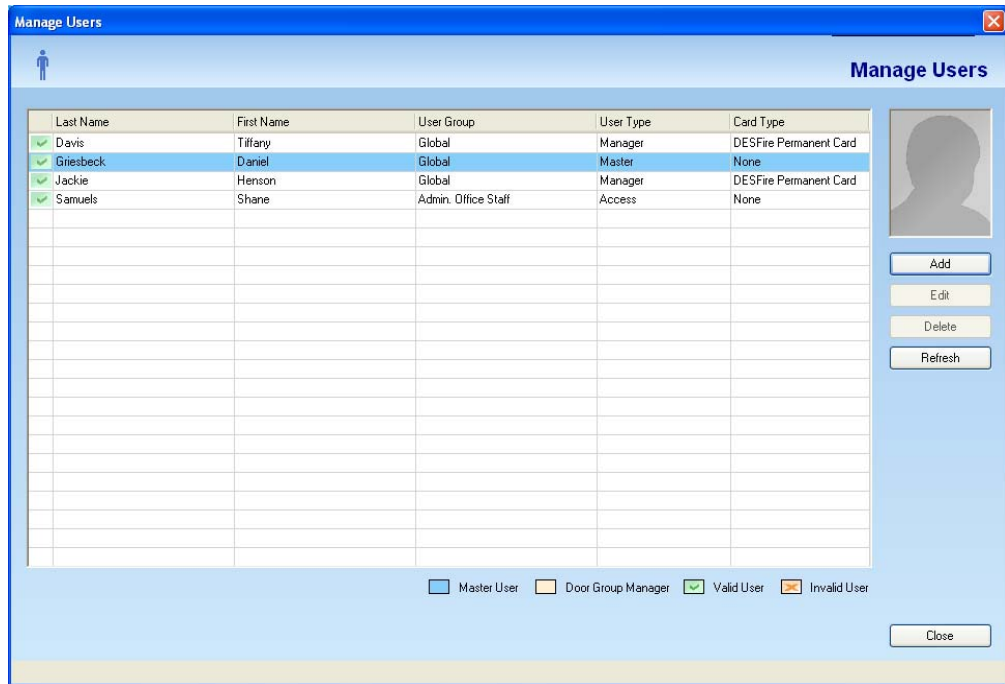
**Note:** The Valid From and Valid To date and time drop-down lists are grayed out when “None” card type is selected.

---

- Click **Save**. The system saves the changes and displays a confirmation message.

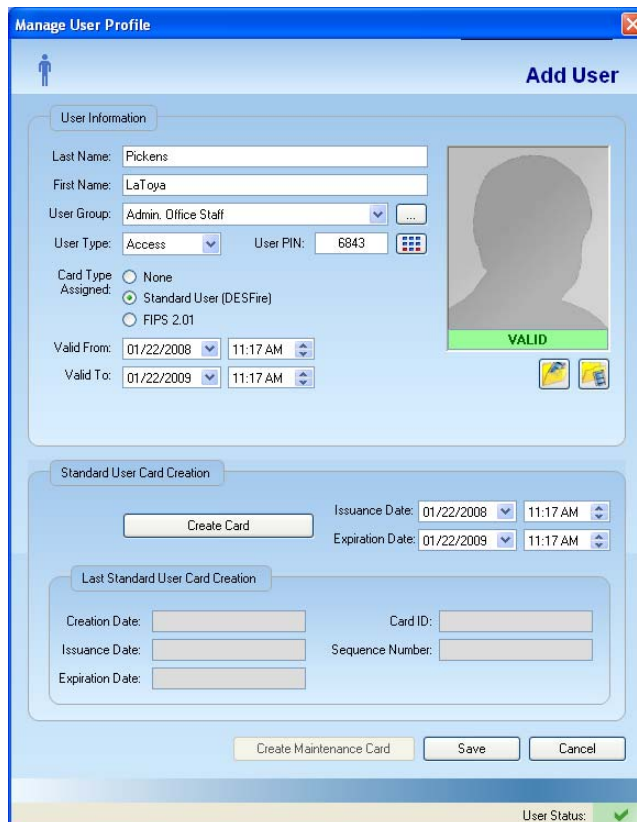


Click **OK**. The software displays the updated **Manage Users** window.



### Standard User (DESFire Card)

If you select **Standard User (DESFire)** from the **Card Type Assigned** area, complete the following steps. You will encode and assign a DESFire card to the user during this process:



- Select the **Valid From** date from the drop-down list.

Select the **Valid From** time, using the up and down arrows.

Select the **Valid To** date from the drop-down list. Note: This for now is limited to 3 years max, or the expiry date encoded on the FIPS card for this user, whichever date expires first.

Select the **Valid To** time, using the up and down arrows.

Click **Create Card**. The Smart Card enroller prompts you to present a card.

Present a blank DESFire card to the Smart Card enroller as shown.



When encoding is complete, the software confirms that the permanent card was created.



If encoding is not successful, the system displays a failure message.



Click **OK**. The software returns to the **Add User** window and displays a confirmation message in the status bar.

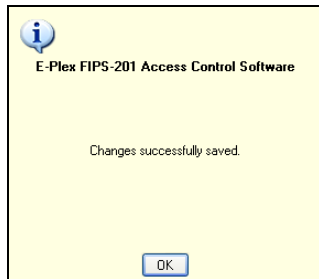


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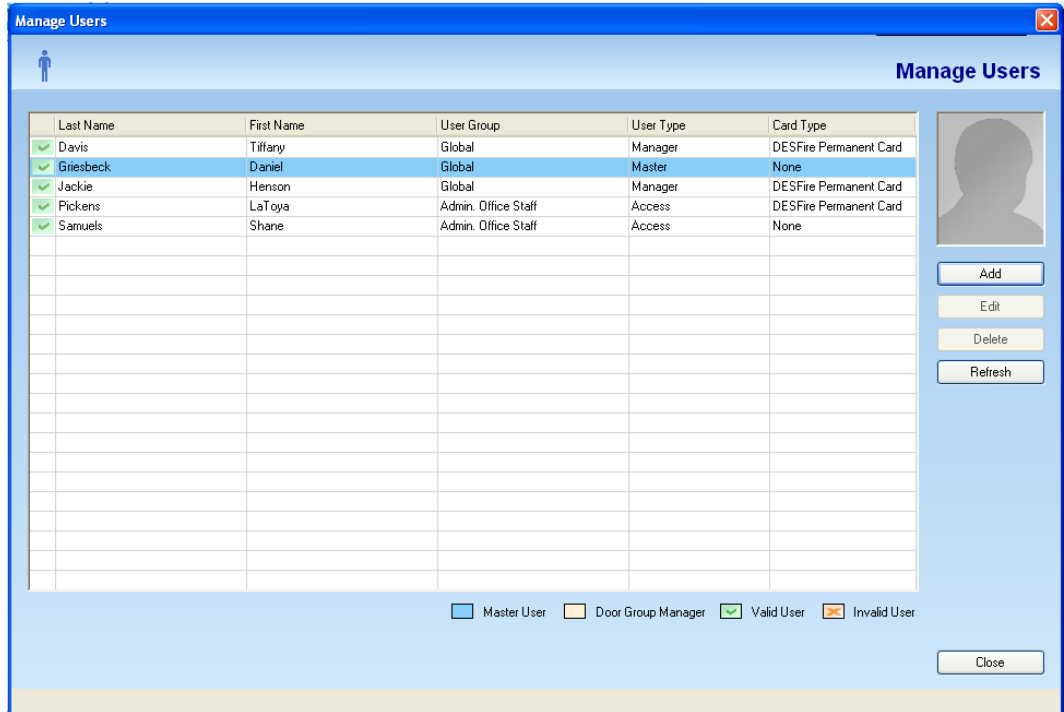
**Note:** This message includes the list number of the user ID created and the user status (a green check mark indicates that the user is active in the system).

---

Click **Save**. The system saves the changes and displays a confirmation message.



Click **OK**. The software displays the updated **Manage Users** window.



## FIPS 2.01 User (FRAC, PIV, TWIC, CAC NG/EP etc type cards)

If you select **FIPS 2.01** from the **Card Type Assigned** area, complete the following steps. You will assign a pre-encoded, pre-authenticated (by the respective agency) FIPS 2.01 card to the user profile in the database during this process.

The screenshot shows the 'Manage User Profile' window. The 'User Information' section contains the following fields: Last Name: Thomas, First Name: Jawa, User Group: Global, User Type: Manager, User PIN: 6044. The 'Card Type Assigned' section has three radio buttons: None, Standard User (DESFire), and FIPS 2.01 (selected). The 'Valid From' date is 01/22/2008 and the 'Valid To' date is 01/22/2009. A 'VALID' status indicator is visible next to a placeholder image. The 'FIPS 2.01 Card Enrollment' section includes an 'Enroll FIPS 2.01 User Card' button and a 'Last FIPS 2.01 Card Enrollment' section with fields for Enrollment Date, Assurance Level, Issuance Date, Card ID, Expiration Date, and Sequence Number. At the bottom are 'Create Maintenance Card', 'Save', and 'Cancel' buttons. The 'User Status' at the bottom right is green with a checkmark.

- Select the **Valid From** date from the drop-down list.

Select the **Valid From** time, using the up and down arrows.

Select the **Valid To** date from the drop-down list.

Select the **Valid To** time, using the up and down arrows.

Click **Enroll FIPS 2.01 User Card**.

The software displays the **FIPS 2.01 Card Enrollment Validation Steps** window.

The screenshot shows the 'FIPS 2.01 Card Enrollment' window. The title bar reads 'FIPS 2.01 Card Enrollment'. The main area is titled 'FIPS 2.01 Card Enrollment' and contains a 'Validation Steps' section with a large empty text area. A 'Close' button is located at the bottom right.

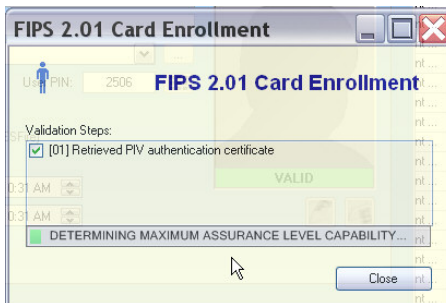
Insert the FIPS 2.01 card inside the front of the Smart Card enroller slot with the gold plated smart chip inserted into the card slot to make contact with the enroller' contact reader inside - as shown below.



Leave the FIPS 2.01 card in the enroller in the slot until enrollment is complete.



The software displays the **FIPS 2.01 Card Enrollment Validation Steps** window.



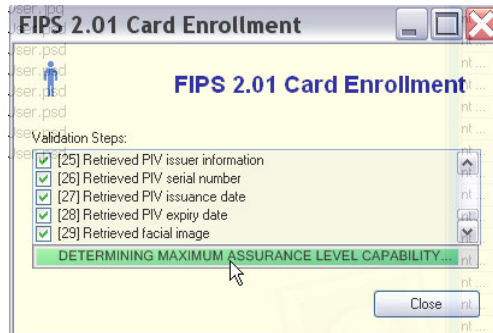
During the validation steps, the system will display the **FIPS Card PIN Authentication** window to verify this FIPS card user's (private) PIN encoded on the card.



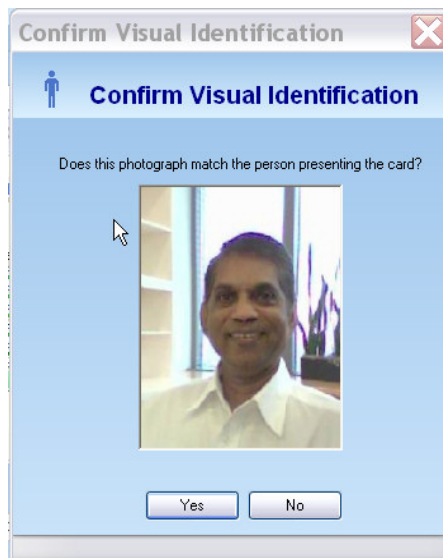
**Important:** This FIPS card PIN which has already been encoded on the FIPS card is different from the PIN that is generated in the E-Plex FIPS-201 database for this user. Only the holder of this FIPS card knows this PIN (for confidentiality) and so you will require this card holder's presence to input the PIN on the PC keyboard when enrolling this user.

Enter this **FIPS Card PIN** and click **OK**.

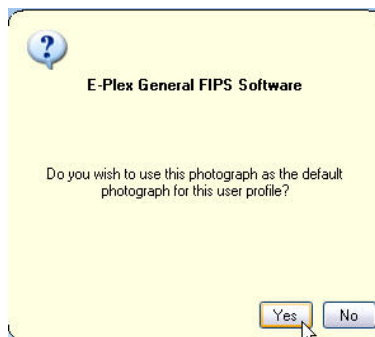
The system continues with the **FIPS 2.01 Card Enrollment Validation** process as shown below in this window.



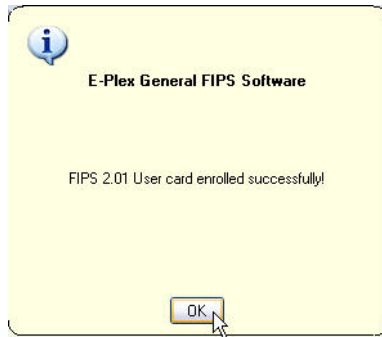
When the enrollment process is completed, the system displays a **Confirm Visual Identification** window.



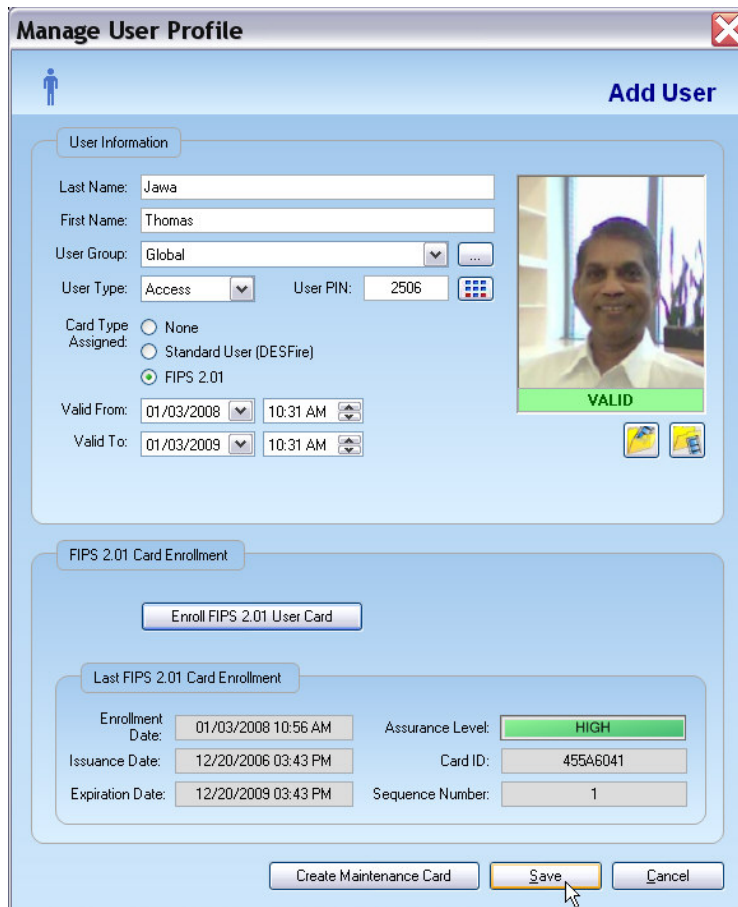
The software prompts you to confirm the photograph for the user, extracted from the card. Click **Yes**.



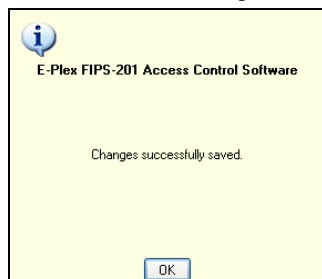
Click **Yes**. The system confirms that the FIPS 2.01 user card was enrolled successfully.



Click **OK** and then **Close**. The system displays the updated **Add User** window.

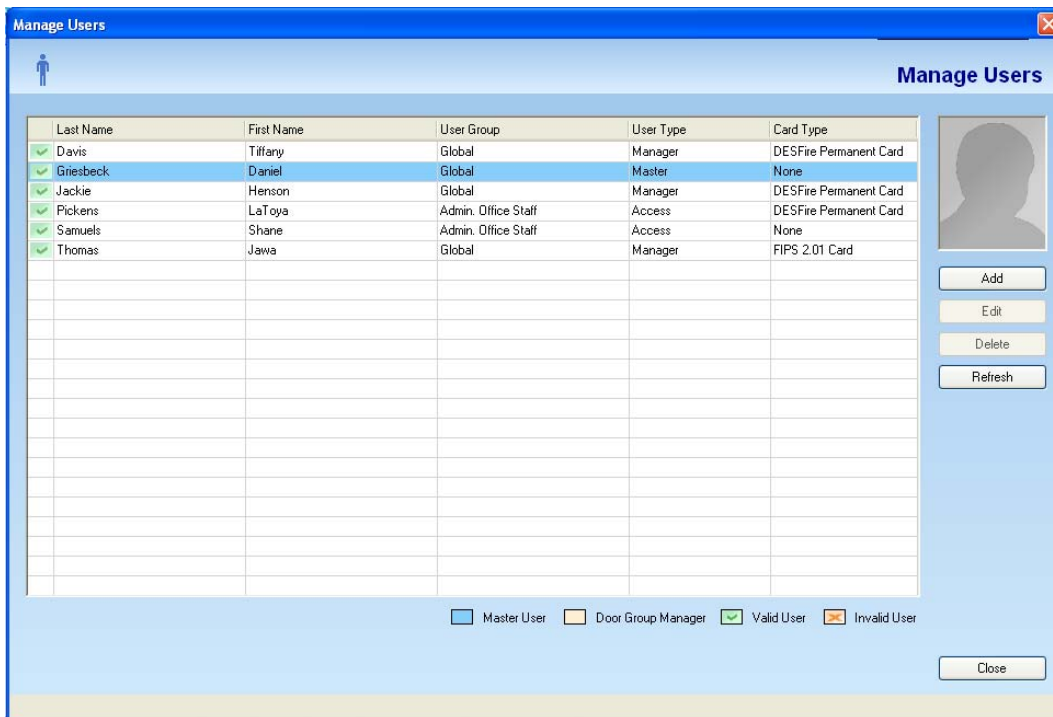


Click **Save**. The system saves the changes and displays a confirmation message.





Click **OK**. The software returns to the updated **Manage Users** window.



You can now safely remove the FIPS 2.01 card from the Smart Card enroller.

## Editing a User

Complete the following steps to edit a user:

- From the **Manage Users** window, click the preferred user.

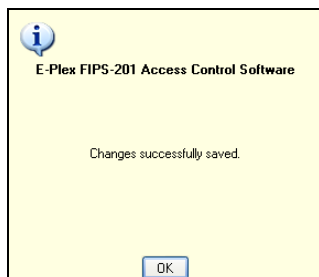
Click **Edit**. The software displays the **Edit User** window.

The screenshot shows the 'Manage User Profile' window with the following fields and options:

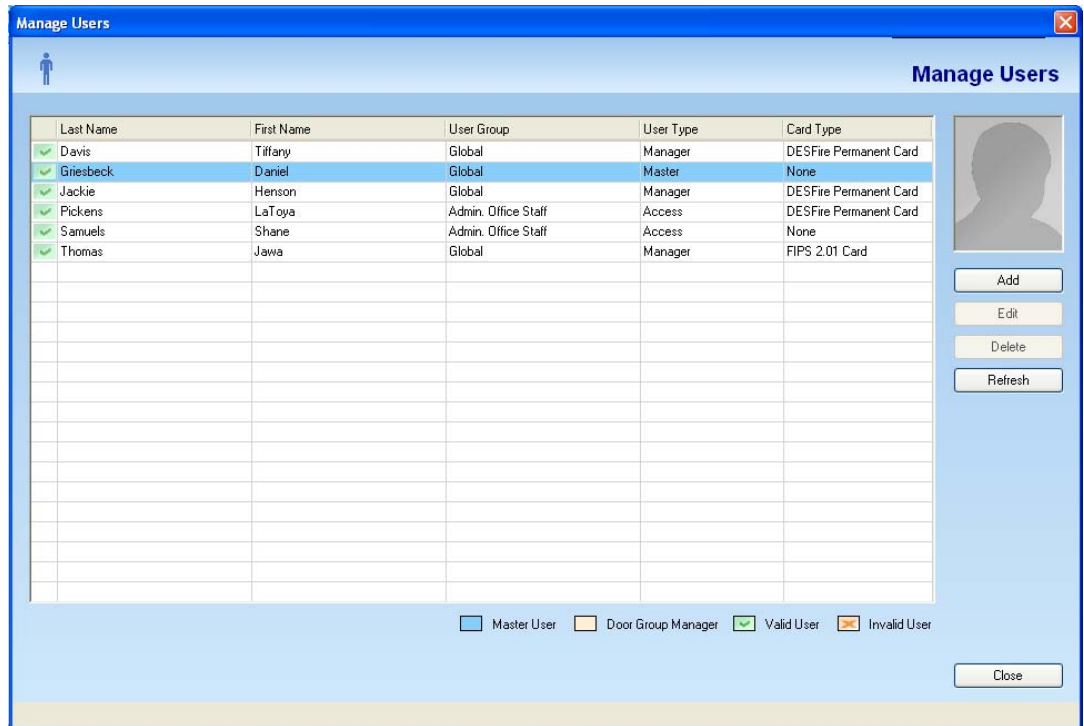
- User Information:**
  - Last Name: Shephard
  - First Name: Robert
  - User Group: UG-Technical
  - Access Group: AG-TechStaff
  - User Type: Access
  - User PIN: 7090
  - Card Type Assigned:  None,  Standard User (DESFire),  FIPS 2.01
  - Valid From: 10/21/2008 02:08 PM
  - Valid To: 10/21/2009 02:08 PM
- FIPS 2.01 Card Enrollment:**
  - Enroll FIPS Card button
  - Last FIPS 2.01 Card Enrollment:
    - Enrollment Date: 10/21/2008 02:10 PM
    - Assurance Level: STANDARD
    - Issuance Date: 12/14/2007 06:46 PM
    - Card ID: E1B3324DDA8CAF802123AA2ED9E282B7
    - Expiration Date: 12/07/2012 06:46 PM
    - Sequence Number: 1
- Buttons: Create Maintenance Card, Save, Cancel

Edit any or all required fields where changes needed to be made.

Click **Save**. The system saves the changes and displays a confirmation message.



Click **OK**. The software displays the updated **Manage Users** window.



---

**Note:** You should update your locks to reflect modified user profile by transferring the changed info to the M-Unit and uploading/programming the information to the locks. For more information, refer to **M-Unit Handheld** in Chapter 5, **Programming and Auditing Locks**.

---

## Deleting a User

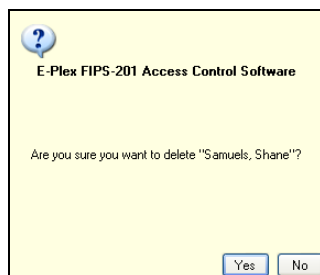
Complete the following steps to delete a user:

---

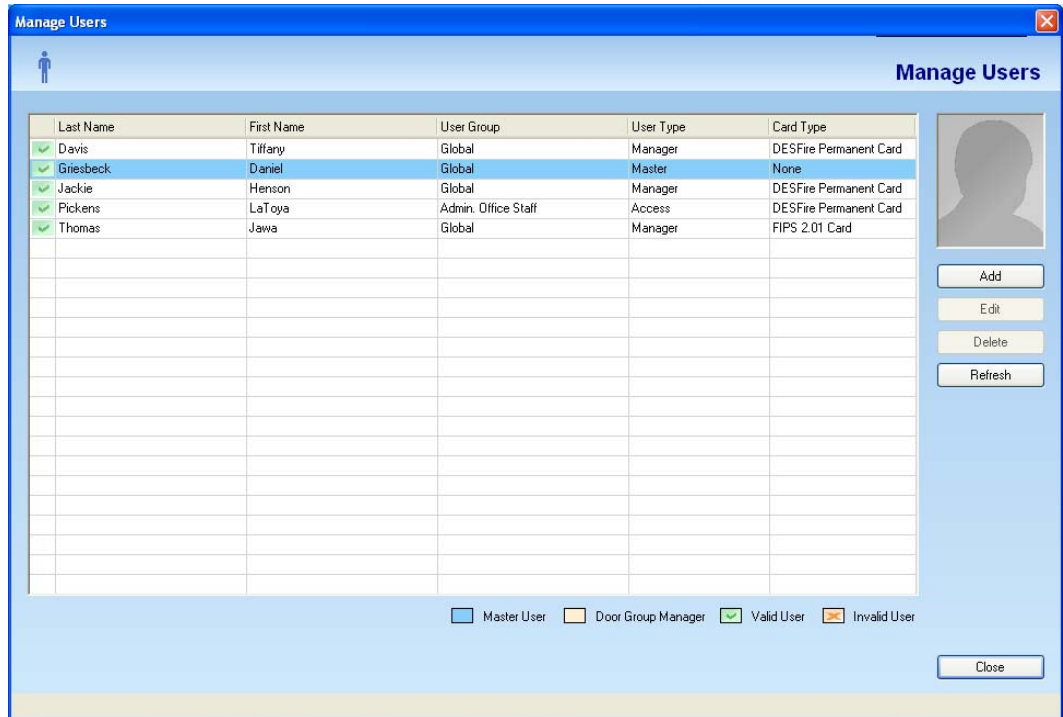
**Note:** You cannot delete a user if s/he is assigned to a door; you must first unassign this user from the door and then delete from the database.

---

- From the **Manage Users** window, select a user to delete.
- Click **Delete**. The software prompts you for confirmation.



Click **Yes**. The software displays the updated **Manage Users** window.



**Note:** You should update your locks to reflect any unassigned and deleted users by transferring the deleted user(s) info to the M-Unit and uploading/programming this information to the locks. For more information, refer to **M-Unit Handheld** in Chapter 5, **Programming and Auditing Locks**.

## Creating Maintenance Cards (Temporary Replacement & Quick Delete cards)

Complete the following steps to create a maintenance (replacement) card for a user:

**Note:** Maintenance cards can only be DESFire cards.

- From the **Manage Users** window, select a user who had been assigned either a permanent Standard (DESFire) card or a permanent FIPS 2.01 card for whom you need to create a maintenance card. You can encode three types of maintenance cards – (i) a card to be used as a temporary replacement of a user's permanent card; this card when used in the lock the first time will de-activate this user's permanent card (temporarily) so that only ONE valid card for this user will work in the lock, (ii) a card to re-activate the temporarily de-activated permanent card of this user and (iii) a card to quickly delete this user from the lock.

A typical scenario is when a user had either lost her/his permanent card or had forgotten it at home etc so that you can encode and issue a temporary replacement card with an expiry. Then when s/he brings the permanent card back to work, say the next day, you will have to encode the re-activation (of the permanent card) and present it on the lock reader of the locks/doors where this user was using the temporary replacement card for access. This action will re-activate the user's permanent card for access and at the same time will "kill" the temporary replacement card permanently.

**Note:** All these above actions are performed easily without having to use the M-Unit PDA for uploading data into the lock.

Click **Edit**. The software displays the **Edit User** window.

The screenshot shows the 'Manage User Profile' window with the 'Edit User' tab selected. The form is divided into several sections:

- User Information:** Includes fields for Last Name (Pickens), First Name (LaToya), User Group (Admin. Office Staff), User Type (Access), and User PIN (2069). There are also radio buttons for Card Type Assigned: None, Standard User (DESFire) (selected), and FIPS 2.01. Validity dates are set from 01/22/2008 to 11:21 AM to 01/22/2009 to 11:21 AM. A placeholder image shows a 'VALID' status.
- Standard User Card Creation:** Features a 'Create Card' button and fields for Issuance Date and Expiration Date, both set to 01/22/2008 11:21 AM to 01/22/2009 11:21 AM.
- Last Standard User Card Creation:** Displays a table of card details:

Creation Date:	01/22/2008 11:25 AM	Card ID:	04541551001F80
Issuance Date:	01/22/2008 11:21 AM	Sequence Number:	1
Expiration Date:	01/22/2009 11:21 AM		

At the bottom, there are buttons for 'Create Maintenance Card', 'Save', and 'Cancel'. The status bar at the bottom right shows 'User ID: 10' and 'User Status: ✓'.

Click **Create Maintenance Card**. The system displays the **Create Maintenance Card** window.

The screenshot shows the 'Create Maintenance Card' window. It features a 'Maintenance Card Creation' section with three radio button options: 'Temporary Replacement User Card' (selected), 'Reactivate Permanent User Command Card', and 'Delete User Command Card'. There is a 'Create Card' button and an 'Expiration Date' field set to 01/29/2008 12:08 PM. An information icon provides a note: 'The Temporary Replacement User card replaces the Permanent User card for the validity period specified. Once this card has been read by the lock, the Permanent User card for this user will be deactivated until a Reactivate Permanent User Command card is read by the lock.' Below this is a 'Last Temporary Replacement User Card Creation' section with empty fields for Creation Date, Expiration Date, Card, and Sequence Number. A 'Close' button is located at the bottom right.

Select the function of the card to be created (one of the three selections):

- **Temporary Replacement User Card** – Grants the user temporary access. Create this temporary card for an existing user who may have forgotten to bring her/his original user card (FIPS 2.01 or DESFire) to work and needs normal access to all her/his doors.

Only this temporary card or the original permanent card of this user will work in the lock, but not both at the same time. The temporary card will either expire in the lock based on its encoded expiration time, or it can be deactivated anytime by reactivating the original (permanent) user card (see **Reactivate Permanent User Card** below) and using it in the lock(s).

The default expiration time is four days (96 hours), which can be increased or decreased.

- **Reactivate Permanent User (Command) Card** – Reactivates the permanent user card in the system database. When created and then presented at a lock/door, this card reactivates this user's original permanent card and permanently "kills" the temporary replacement card of this user.

The default expiration time is one week (seven days), which can be increased or decreased.

- **Delete User (Command) Card** – Deletes this user in the lock(s) without having to do the same using the PDA.

---

**Important:** *If you delete a user this way, you must also remember to delete this user in the Access Assignment configuration profile in the database because this person is still in the PC's database.*

---

The default expiration time is four days (96 hours), which can be increased or decreased.

Select the **Expiration Date** from the drop-down list and calendar.

Select the **Expiration** time, using the up and down arrows.

Click **Create Card**. The software prompts you to place a card on the card reader/writer.

Present a DESFire Card on card reader/writer to encode one of the three types of maintenance cards you chose to encode.

When encoding is complete, the software confirms that the card was created.



Click **OK**. The system displays the updated **Create Maintenance Card** window.

**Create Maintenance Card**

Maintenance Card Creation

Temporary Replacement User Card

Reactivate Permanent User Command Card

Delete User Command Card

Create Card Expiration Date: 01/26/2008 12:13 PM

**i** The Reactivate Permanent User Command card reactivates the Permanent User card. Once this card has been read by the lock, the Temporary Replacement User card will be deactivated for the lock.

Last Reactivate User Command Card Creation

Creation Date: 01/22/2008 12:15 PM Card: 04531A51001F80

Expiration Date: 01/26/2008 12:13 PM Sequence Number: 4

Close

Reactivate User Command card creation successful!

When you are finished, click **Close**. The system returns to the **Edit User** window. Click **Save**. The system saves the changes and displays a confirmation message.

**i**

E-Plex FIPS-201 Access Control Software

Changes successfully saved.

OK

Click **OK**. The system returns to the **Manage Users** window.

# Managing Access Assignment

---

The “specific” access assignment function allows you to assign each door, one at a time—its access granting schedules to users, their privileges, if any etc.

**Important:** If you had already assigned doors access to your users, either via the **Managing Access Group** menu dialog or via the **Managing User** menu dialog but want to give “privileges” to certain users, you have to do this under this menu dialog. Also, If you have only a handful of doors/locks, say under 10 and have only, say under 50 users in your facility, it may be more convenient to assign door access to users in this menu dialog, rather than in the **Access Group** menu, as described earlier.

From this menu, you must select a door and assign the users who should have access to this door. Also, for each user you must select and assign one or more available schedules that were already assigned to this door earlier. For each user you can also optionally assign any one or more of the following three privileges:

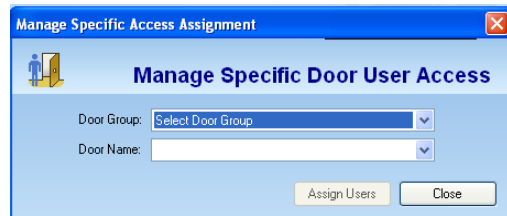
- Override holidays/vacations
- Override deadbolt/privacy
- First user passage entry

Finally, you can optionally enable the Passage Mode function (by default, it is disabled) so that the lock can be put in free passage mode, if desired later. After this process, the lock configuration data with its users are set up and prepared to be synchronized to the M-Unit and then uploaded to the door/lock.

To manage door access assignment, select **Manage Specific Access Assignment** from the **Access Assignment** menu, or click the **Manage Specific Access Assignment** button.



The software displays the **Manage Specific Door User Access** window.



From this window, you can manage door access assignment, including the following:

- Assigning access schedules
- Assigning users

You may optionally enable the Passage Mode option, allowing free access to the door without any valid PIN or card.

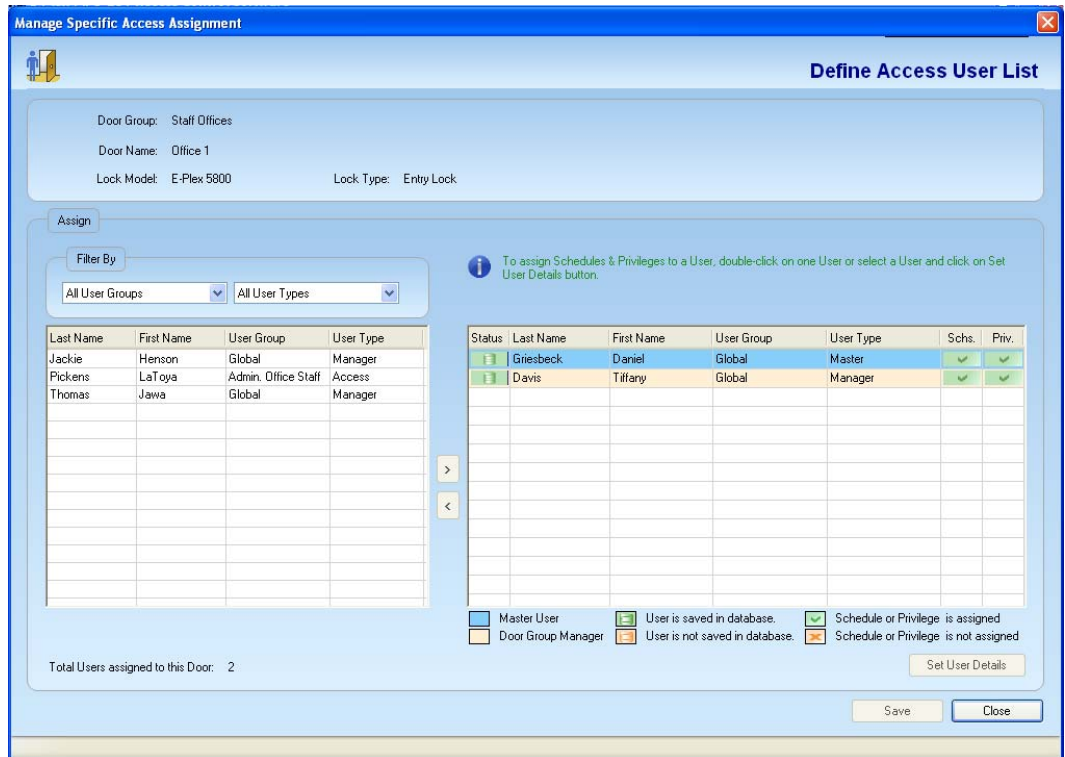
## Assigning All Users to Locks in Access Assignment

Complete the following steps to manage door access assignment:

- Select a **Door Group** from the drop-down list.
- Select a **Door Name** from the drop-down list.



Click **Assign Users**. The software displays the **Define Access User List** window.



---

**Note:** Once you select the door group and the door name, the software displays the Lock **Model** and **Lock Type** for that door.

---

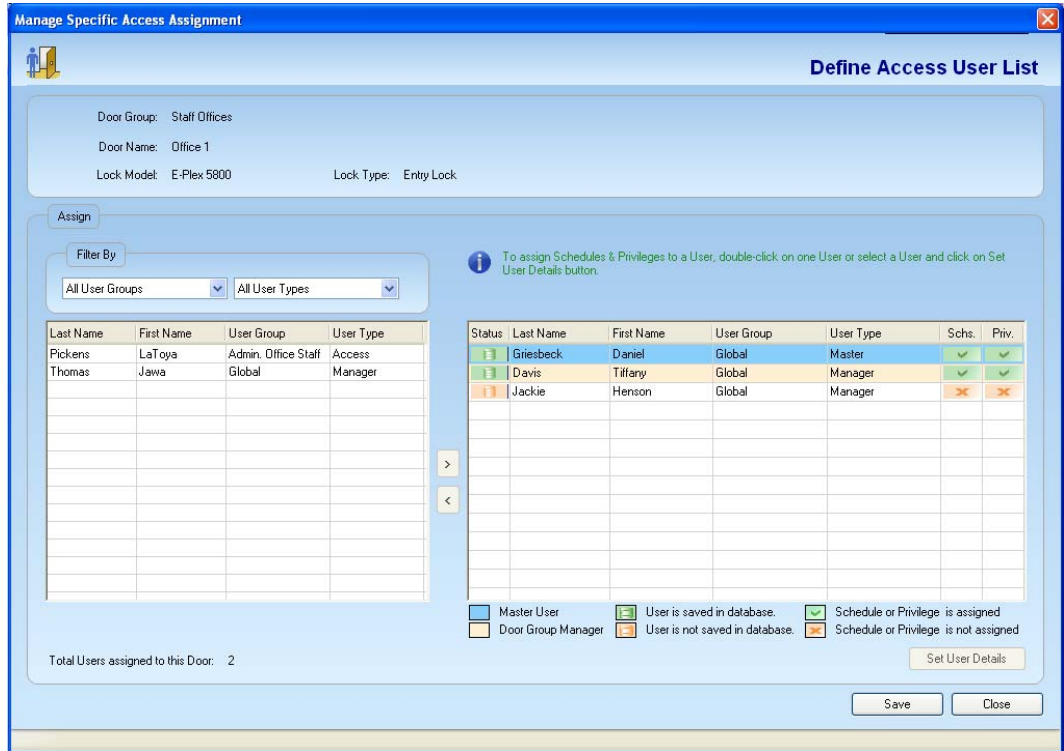
In the **Assign** area, select from the **All User Groups** and **All User Types** drop-down lists to filter search data.

Click the appropriate user name in the list to select it.

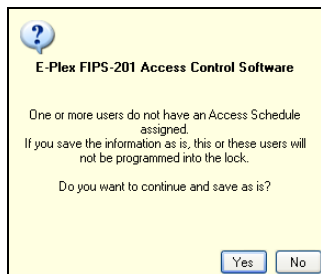
Click the **right arrow**.



The system adds the to the main user list on the right side of the window.

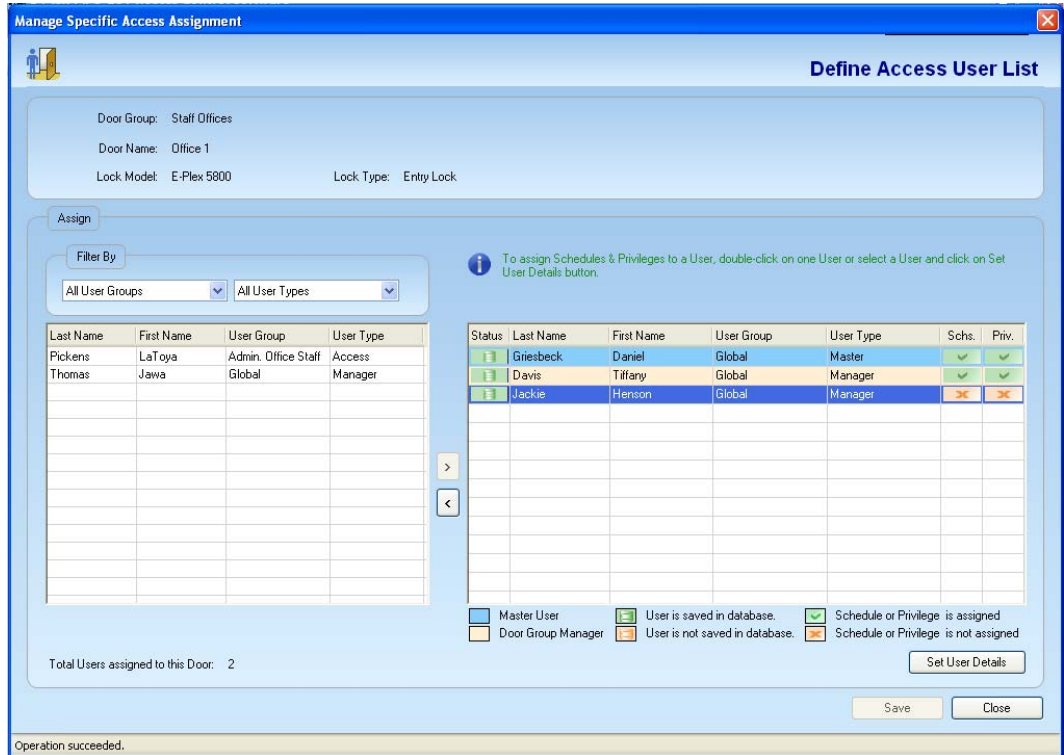


Click **Save**. The system alerts you if the user name does not have an access schedule assigned to it.

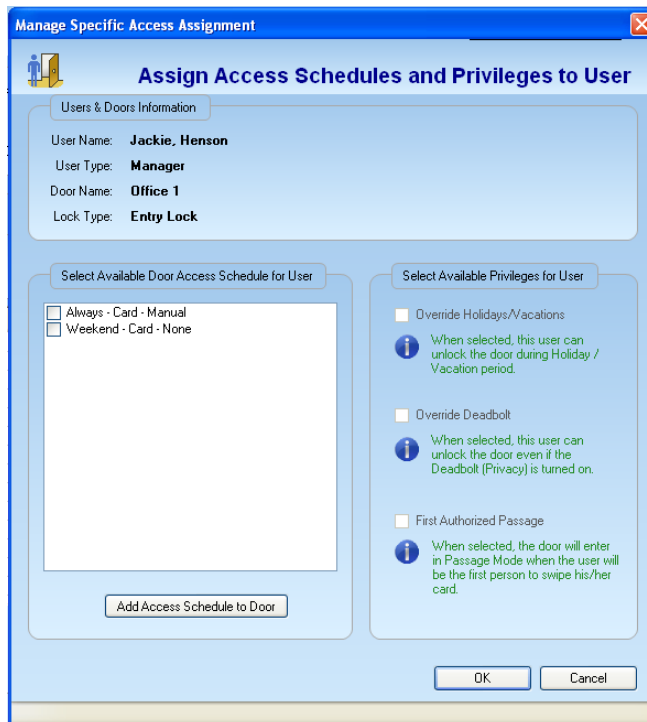


Click **Yes**.

From the main user list, select the user you just assigned.



Click **Set User Details** to assign one or more schedules (mandatory) and any privileges (optional) to this user. The software displays the **Assign Access Schedules and Privileges to User** window.



Check the required Access Schedule(s) and Privilege(s) boxes for this user from that available. Click **OK** when done.

Optionally, you can also add more Access Schedules and Credential usage during these schedules for this door from this menu itself. If you do not want to do this here, skip this “Add Access Schedule to Door” option.

Click **Add Access Schedule to Door**. The software displays the **Assign Door Access Schedules** window. Add your additional schedules with credential usage etc, just like you did earlier under “Managing Schedules” dialog in Section 3

Schedule Name	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Start	End	Credential	Passage Mode
Always	✓	✓	✓	✓	✓	✓	✓	12:00 AM	12:00 AM	Card	Manual
Weekend	✓	✗	✗	✗	✗	✗	✓	12:00 AM	11:00 PM	Card	None
MWF Business Hours	✗	✓	✗	✓	✗	✓	✗	08:00 AM	05:00 PM	Card	None

- Click **Save**. The system returns to the updated **Assign Access Schedules and Privileges to User** window.

---

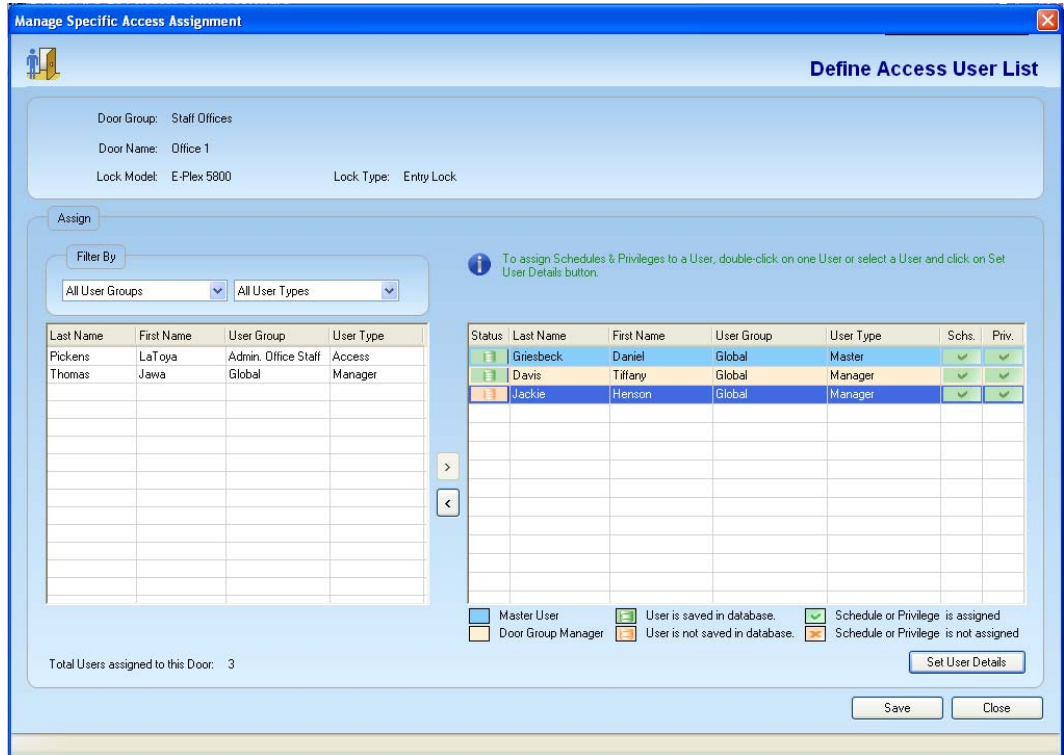
**Important:** If the “Always” door access schedule is selected, no other access schedule can be selected.

---

Choose the applicable options from the **Select Available Privileges for User** area:

- **Override Holidays/Vacations** – The user can unlock the door during holiday/vacation period.
- **Override Deadbolt** – The user can unlock the door even if the deadbolt (privacy) is thrown from inside (projected) for privacy.
- **First Authorized Passage** – The door will enter Passage Mode when this user with this privilege will be the first person to swipe his/her card.

Click **OK**. The software displays the updated **Define Access User List** window.



Click **Save**.

Click **Close**. The software returns to the **Manage Specific Door User Access** window.

Click **Assign Users** to assign additional users or click **Close** to exit.

---

**Note:** You should synchronize all updated doors/locks with these newly assigned users with the M-Unit PDA and then program these doors with the M-Unit by uploading the information to the locks. For more information, refer to **M-Unit Handheld** in Chapter 5, **Programming and Auditing Locks**.

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# Viewing/Printing/Exporting Reports

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The **Reports** option can be used to view and report on the data that you have defined in the E-Plex FIPS-201 software and locks. It can also report on the data that you have uploaded to locks defined in the software and also the lock audits downloaded from locks. Once data have been synchronized from the lock to the PC, you can view and report on data from the lock. The E-Plex FIPS-201 software allows you to generate reports from the **Reports** menu.

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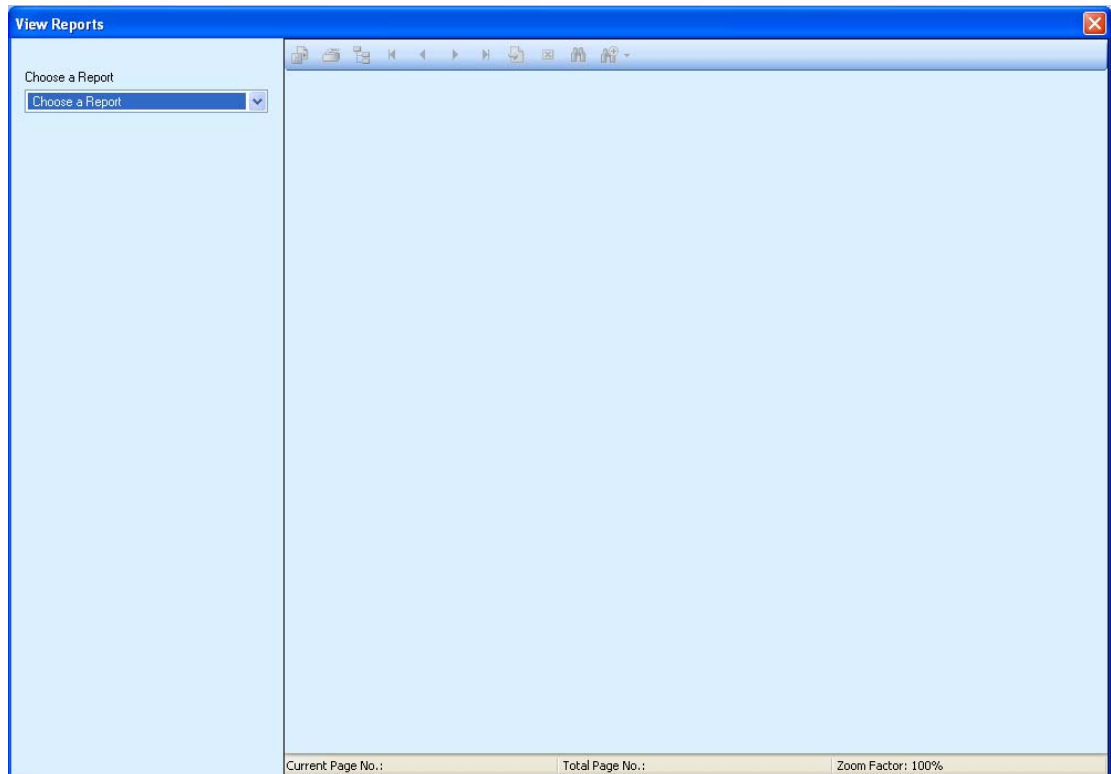
**Note:** Once a report is open for viewing, you will have the option to either print this report or export it in a specific file format type like PDF, Excel, Word etc and save it in any folder of your choice either in your local drive or in any external storage drive.

---

To access reports, select **Reports** from the **Reports** menu or click the **Reports** button.



The software displays the **View Reports** window.



From this window, you can select a report to view, print, or export.

## Viewing Reports

Complete the following steps to view reports:

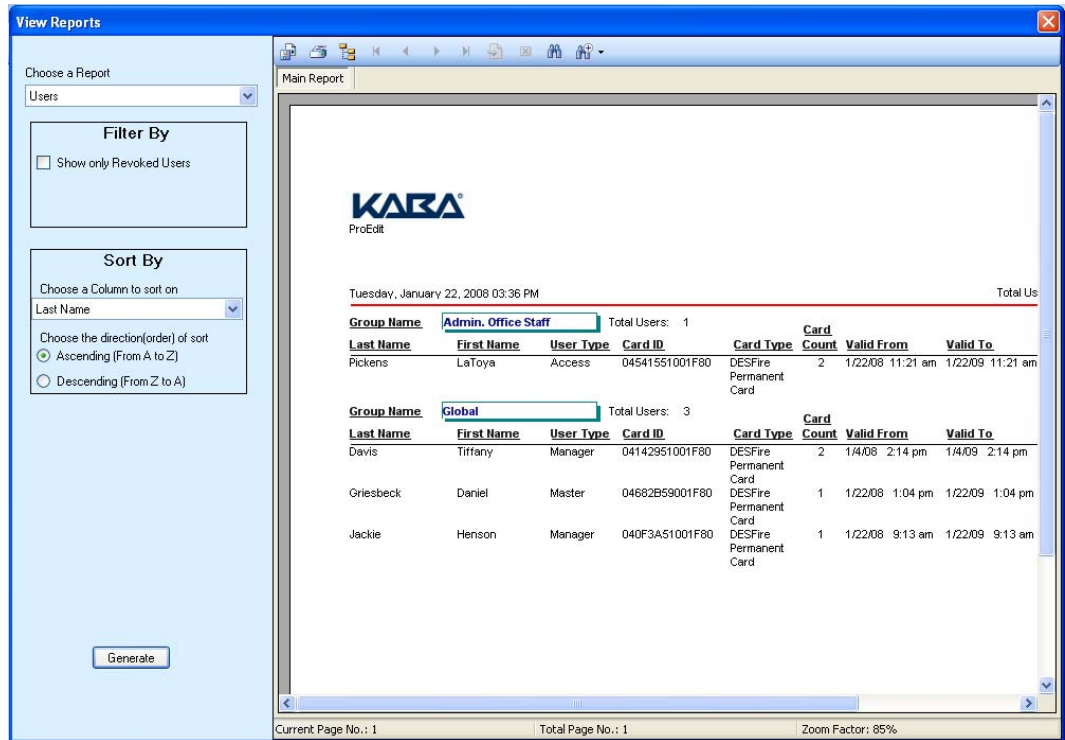
- Select a report from the **Choose a Report** drop-down list in the **View Reports** window.

---

**Note:** The available *Filter By* and *Sort By* options change based on the type of report you choose.

---

Select from the **Filter By** options if you want to filter out particular data item(s) to view.  
 Select from the **Sort By** options to view the data item(s) in a particular sorting order.  
 Click **Generate**. The software displays the selected report in the **Main Report** pane.



If you want to view more Reports, select another report from "Choose a Report" field in the upper left corner of this **View Report** window.

When you are finished viewing the reports, click the red X in the upper right corner to exit the **View Report** window and return to the Main Menu.

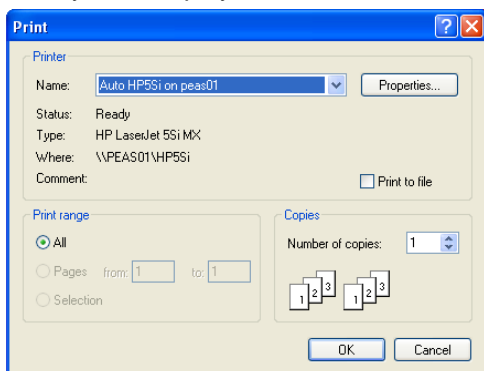
## Printing Reports

Complete the following steps to print a report by first generating it to view:

- Click the **Print Report** icon in the **Main Report** pane.

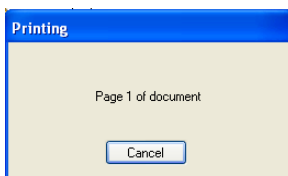


- The system displays the **Print** window.



Select your printer and any additional print options.

Click **OK**. The report is sent to the printer for printing



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**Note:** On some printers, the printed column alignment of a report may not be correct. If this happens, save the file as a text file (the default folder to save reports is **C:\Program Files\Kaba\E-Plex FIPS-201\MainClient\Reports Module\Reports**). Later, you can retrieve the saved report through Windows Explorer, and then print it to get a properly aligned report.

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## Exporting a Report

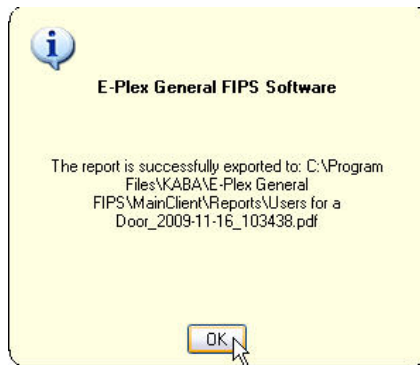
Complete the following steps to export (and save) a report in a specific file format by first generating it to view:

- Select the specific file format you want the report file to be exported and saved. The available file formats are PDF, Word, Excel, Rich Text and HTML.
- Click the **Export Report** icon.





- The folder path where the report shall be exported and saved must have been already configured in the **System Setup/Systems Settings** menu. The report with the selected file format (PDF, Excel, Word etc) will be exported and saved in this folder.



The file name of the report will be the actual name of this Report appended with today's date and time.

Click **OK**. The software returns to the Report window.

# Access Schedules Report

The Access Schedules report displays all schedules that have been defined in the E-Plex FIPS-201 software.

The screenshot shows a software window titled 'View Reports'. On the left, there is a control panel with a dropdown menu set to 'Access Schedules'. Below this are two sections: 'Filter By' with checkboxes for days of the week (all unchecked), and 'Sort By' with a dropdown set to 'Schedule Name' and radio buttons for 'Ascending (From A to Z)' (selected) and 'Descending (From Z to A)'. A 'Generate' button is at the bottom of this panel. The main area displays the 'Access Schedule Report' with the KABA ProEdit logo. It shows the date and time 'Tuesday, January 22, 2008 03:53 PM' and 'Total Schedules: 3'. A table lists three schedules: 'Always', 'MWF Business Hours', and 'Weekend', with columns for days of the week, start, and end times.

Schedule Name	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Start	End
Always	✓	✓	✓	✓	✓	✓	✓	12:00 AM	12:00 AM
MWF Business Hours		✓		✓		✓		08:00 AM	05:00 PM
Weekend	✓						✓	12:00 AM	11:00 PM

From this window, you can print and export/save the Access Schedules report.

# Holidays/Vacations Report

The Holidays/Vacations report displays all holiday/vacation periods that have been defined in the E-Plex FIPS-201 software.

The screenshot shows a software window titled "View Reports". On the left side, there is a control panel with a "Choose a Report" dropdown menu set to "Holidays/Vacations". Below it is a "Sort By" section with a "Choose a Column to sort on" dropdown set to "Holiday/Vacation Name". Underneath, there are two radio buttons for sorting direction: "Ascending (From A to Z)" (which is selected) and "Descending (From Z to A)". A "Generate" button is located at the bottom of this panel. The main report area on the right displays the "KABA ProEdit" logo and the title "Holidays and Vacations Report". It shows the date and time "Tuesday, January 22, 2008 04:24 PM" and a summary "Total Holidays/Vacations: 3". A table follows with three columns: "Holiday/Vacation Name", "Start Date Time", and "End Date Time". The table lists three entries: "Campus Fall Break" (10/11/2008 12:00 AM to 10/19/2008 11:59 PM), "Christmas Holiday" (12/24/2008 12:00 AM to 12/25/2008 11:59 PM), and "Independence Day" (7/4/2008 12:00 AM to 7/5/2008 11:59 PM). The status bar at the bottom indicates "Current Page No.: 1", "Total Page No.: 1", and "Zoom Factor: 85%".

<u>Holiday/Vacation Name</u>	<u>Start Date Time</u>	<u>End Date Time</u>
Campus Fall Break	10/11/2008 12:00 AM	10/19/2008 11:59 PM
Christmas Holiday	12/24/2008 12:00 AM	12/25/2008 11:59 PM
Independence Day	7/4/2008 12:00 AM	7/5/2008 11:59 PM

From this window, you can print and export/save the Holidays/Vacations report.

# Audits from Downloaded Doors Reports

Each E-Plex 5800 lock stores up to 30,000 audit events. The audit file is circular, and the oldest record is overwritten by the most recent. A hard reset does not clear the audit trail for security reasons.

The Audits from Downloaded Doors report displays all door audits that have been downloaded from a door to the PC through the M-Unit. The software displays a list of “download” data files, indicating the name of each door/lock from which a data file has been received.

The screenshot shows the 'View Reports' application window. On the left is a sidebar with the following sections:

- Choose a Report:** A dropdown menu set to 'Audits from Downloaded Doors'.
- Filter By:**
  - Door Groups: Staff Offices
  - Doors: Office 1
  - Audit Dates: Choose an Audit Date
  - User Groups: Choose a User Group
  - Users: Choose a User
- Generate:** A button at the bottom of the sidebar.

The main report area displays the following information:

**KABA Pro Edit**

**Audits from Doors Report**

Thursday, January 24, 2008 03:24 PM

Door Group:	Staff Offices	Audit Date:	1/24/2008 3:21:13 PM	Total Events:	100
Door Name:	Office 1	Firmware Version:	1.0	Number of Opens:	0
Lock Function:	Entry Lock	Lock Model:	E-Plex 5800	Operator:	daniel

Date/Time	Last Name	First Name	User Type	Card Seq.	Transaction
1/24/2008 02:10 PM	Gnesbeck	Daniel	Master	1	Access denied - Invalid Credentials
1/24/2008 02:10 PM	Gnesbeck	Daniel	Master	1	Access denied
1/24/2008 02:10 PM	Gnesbeck	Daniel	Master	1	Access denied - Invalid Credentials
1/24/2008 02:10 PM	Gnesbeck	Daniel	Master	1	Access denied - Invalid Credentials
1/24/2008 02:10 PM	Gnesbeck	Daniel	Master	1	Access denied
1/24/2008 02:10 PM	Gnesbeck	Daniel	Master	1	Access denied - Invalid Credentials
1/24/2008 02:10 PM	Gnesbeck	Daniel	Master	1	Access denied
1/24/2008 02:10 PM	Pickens	LaToya	Access	2	Lock unlock/lock. Duo to an access granted, the lock unlocked and after the programmed opening duration, relocked.
1/24/2008 02:11 PM				1	Access denied - The user is not found in the lock database
1/24/2008 02:11 PM	Pickens	LaToya	Access	5	DES Fire command card 'reactivate FIPS' succeed
1/24/2008 02:11 PM	Pickens	LaToya	Access	5	DES Fire command card 'reactivate FIPS' succeed
1/24/2008 02:16 PM	Gnesbeck	Daniel	Master	1	Access denied - Invalid Credentials
1/24/2008 02:16 PM	Davis	Tiffany	Manager	2	Lock unlock/lock. Duo to an access granted, the lock unlocked and after the programmed opening duration, relocked.
1/24/2008 02:18 PM				0	Access denied
1/24/2008 02:19 PM	Pickens	LaToya	Access	2	Lock unlock/lock. Duo to an access granted, the lock unlocked and after the programmed opening duration, relocked.
1/24/2008 02:20 PM	Gnesbeck	Daniel	Master	1	Access denied - Invalid Credentials
1/24/2008 02:20 PM	Gnesbeck	Daniel	Master	1	Access denied
1/24/2008 02:20 PM	Pickens	LaToya	Access	5	DES Fire command card 'reactivate FIPS' succeed
1/24/2008 02:20 PM	Pickens	LaToya	Access	5	DES Fire command card 'reactivate FIPS' succeed
1/24/2008 02:22 PM				0	Access denied

Page 1 of 5

Current Page No.: 1 | Total Page No.: 5 | Zoom Factor: Page Width

From this window, you can print and export/save the Audits from Downloaded Doors report.

# Cards Status Report

The Cards Status report displays enrollment, creation and expiry status of all cards in the system – Permanent FIPS cards, Permanent and Temporary DESFire etc cards.

The screenshot shows the 'View Reports' window with the 'Cards Status' report selected. The sidebar on the left contains the following options:

- Choose a Report:** Cards Status
- Filter By:** Card Types (Choose a Card Type)
- Sort By:** Choose a Column to sort on (Last Name), Ascending (From A to Z) (selected), Descending (From Z to A)
- Generate** button

The main report area displays the following information:

**KABA ProEdit**

Tuesday, January 22, 2008 04:04 PM Total Cards: 7

DESFire Permanent Card					
Card Type	Last Name	First Name	Card ID	Expiration	DESFire Creation Date
	Davis	Tiffany	04142951001F80-2	1/4/2009 02:14 PM	1/22/2008 01:03 PM
	Griesbeck	Daniel	04682B59001F80-1	1/22/2009 01:04 PM	1/22/2008 01:04 PM
	Jackie	Henson	040F3A51001F80-1	1/22/2009 09:13 AM	1/22/2008 09:30 AM
	Pickens	LaToya	04541551001F80-5	1/22/2009 11:21 AM	1/22/2008 12:01 PM

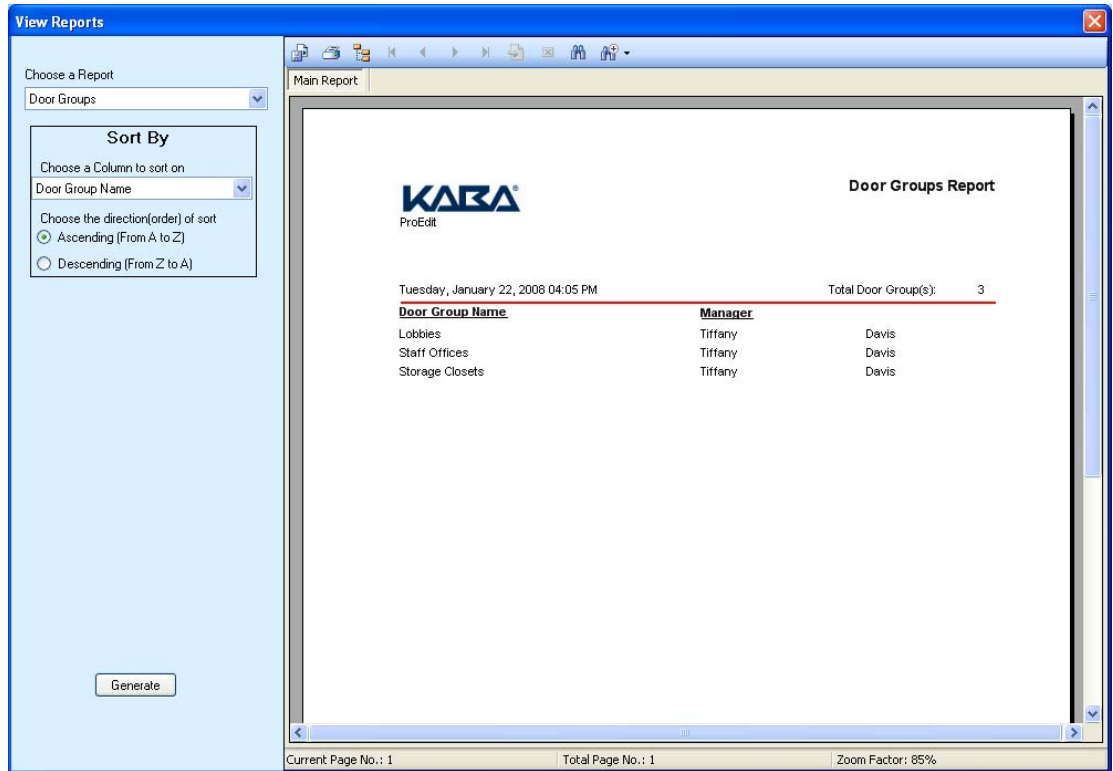
DESFire 'Reactivate Permanent User' DESFire					
Card Type	Last Name	First Name	Card ID	Expiration	DESFire Creation Date
	Pickens	LaToya	04531A51001F80-5	1/22/2009 11:21 AM	1/22/2008 12:14 PM
	Pickens	LaToya	04531A51001F80-5	1/22/2009 11:21 AM	1/22/2008 12:15 PM
	Pickens	LaToya	04531A51001F80-5	1/22/2009 11:21 AM	1/22/2008 12:20 PM

Current Page No.: 1 | Total Page No.: 1 | Zoom Factor: 85%

From this window, you can print and export/save the Cards Status report.

# Door Groups Report

The Door Groups report displays all door groups that have been defined in the E-Plex FIPS-201 software.



From this window, you can print and export/save the Door Groups report.

# Doors Report

The Doors report displays all doors, up to 100,000 that have been defined in the E-Plex FIPS-201 software.

**View Reports**

Choose a Report  
Doors

**Filter By**

M-Unit Sync Required

Lock Function Type  
Choose a Lock Function Type

**Sort By**

Choose a Column to sort on  
Door Name

Choose the direction(order) of sort  
 Ascending (From A to Z)  
 Descending (From Z to A)

Generate

**Main Report**

KABA  
ProEdit

Tuesday, January 22, 2008 04:08 PM

**DOOR GROUP NAME** Staff Offices

Door Name	Assurance Level	Lock Function	Remote Unlock	Tamper Count	Passage Mode Enabled	Tamper Time (Sec.)	Buzzer Volume
Office 1	Standard	Entry Lock	<input type="checkbox"/>	4	<input checked="" type="checkbox"/>	30	1

**DOOR GROUP NAME** Storage Closets

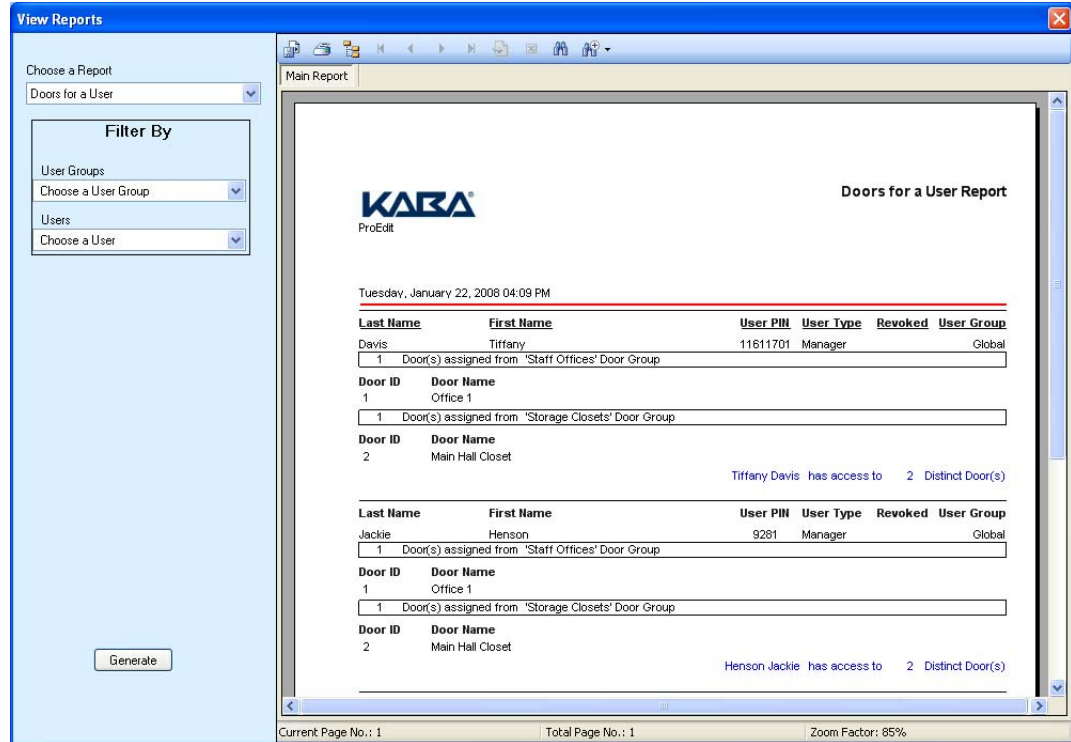
Door Name	Assurance Level	Lock Function	Remote Unlock	Tamper Count	Passage Mode Enabled	Tamper Time (Sec.)	Buzzer Volume
Main Hall Closet	Standard	Entry Lock	<input type="checkbox"/>	4	<input type="checkbox"/>	30	2

Current Page No.: 1      Total Page No.: 1      Zoom Factor: 85%

From this window, you can print and export/save the Doors report.

# Doors for a User Report

The Doors for a User report allows you to view all doors that a particular user has been assigned to, as well as the access schedules associated with each door, in the E-Plex FIPS-201 software.



From this window, you can print and export/save the Doors for a User report.



# Access Groups with Doors Info Report

The Access Groups with Doors Info report allows you to view all doors assigned to a particular access group in the E-Plex FIPS-201 software.

**View Reports**

Choose a Report  
Access Groups with Doors info

**Filter By**  
Door Groups  
Choose a Door Group

**Sort By**  
Choose a Column to sort on  
Door Name  
Choose the direction(order) of sort  
 Ascending (From A to Z)  
 Descending (From Z to A)

Generate  
PDF  
Export

**Main Report**

**KABA**  
Kaba-KWS

**Access Groups with Doors info Report**

Wednesday, January 14, 2009 03:02 PM Total Access Groups: 3

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**Access Group** AG-Office Total Doors: 4

Door Name	Credential	Schedule Name	Passage Mode	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Start	End
E5800-MortD B	Card	7AM-7PM,M-F	None		✓	✓	✓	✓	✓	✓	07:00 AM	07:00 PM
E5800-Resdt Lock	Card	7AM-7PM,M-F	None		✓	✓	✓	✓	✓	✓	07:00 AM	07:00 PM
E5800-Resdt Lock	Card	8AM-1PM,Sat&Sun	None	✓							08:00 AM	01:00 PM
JawaDemo-E5800Cyl	Card	Always	Manual	✓	✓	✓	✓	✓	✓	✓	12:00 AM	12:00 AM

---

**Access Group** AG-TechStaff Total Doors: 2

Door Name	Credential	Schedule Name	Passage Mode	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Start	End
E5800-MortD B	Card	7AM-7PM,M-F	None		✓	✓	✓	✓	✓	✓	07:00 AM	07:00 PM
Lab-XYZ	Card	Always	Manual	✓	✓	✓	✓	✓	✓	✓	12:00 AM	12:00 AM

---

**Access Group** Clone of AG-TechStaff Total Doors: 2

Door Name	Credential	Schedule Name	Passage Mode	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Start	End
E5800-MortD B	Card	7AM-7PM,M-F	None		✓	✓	✓	✓	✓	✓	07:00 AM	07:00 PM
Lab-XYZ	Card	Always	Manual	✓	✓	✓	✓	✓	✓	✓	12:00 AM	12:00 AM

Current Page No.: 1 Total Page No.: 1 Zoom Factor: 85%

From this window, you can print and export/save the Access Groups with Doors Info report.

# Access Groups with Users Info Report

The Access Groups with Users Info report allows you to view all users assigned to a particular access group in the E-Plex FIPS-201 software.

The screenshot shows the 'View Reports' window with the 'Access Groups with Users Info Report' selected. The left sidebar contains filters and sorting options. The main report area displays two tables of user information.

**Filter By:**  
User Groups: Choose a User Group

**Sort By:**  
Choose a Column to sort on: Last Name  
Choose the direction(order) of sort:  
 Ascending (From A to Z)  
 Descending (From Z to A)

**AG-Office** Total Users: 5

User Group	Last Name	First Name	Card ID	User PIN	Revoked
UG-Technical	CAC-Giovanni-Gemalto	Gemalto GCX4 72K DI	82161314		
UG-Office	CAC-Jawa-Gemalto	Gemalto-PIV	60992424		
UG-Office	CAC-Jim-Gemplus	Gemplus GXP3 64V2N	40268215		
UG-Technical	CAC-Mario-Oberthur	ID One V5.2 Dual	32585219		
UG-Office	CAC-Tom-Gemplus	Gemplus GXP3 64V2N	13487994		

**AG-TechStaff** Total Users: 9

User Group	Last Name	First Name	Card ID	User PIN	Revoked
UG-Technical	CAC-Giovanni-Oberthu	Oberthur-PIV	63174554		
UG-Office	CAC-Jawa-Oberthur	ID One V5.2 Dual	49657681		
UG-Technical	CAC-Mario-Gemalto	Gemalto-PIV	86416189		
UG-Office	DG-Manager1	DG-Mgr1	98762428		
Global	FRAC-Thomas	FRAC-Jawa	87654321		
UG-Office	Guest	User	88885550		
UG-Office	Service	User	XXX		
UG-Technical	Shephard	Robert	70902634		
UG-Office	TWMC-Thomas	TWMC-Jawa	85814854		

Buttons: Generate, PDF, Export

Page Info: Current Page No.: 1, Total Page No.: 1, Zoom Factor: 85%

From this window, you can print and export/save the Access Groups with Users Info report.

# Operators Report

The Operators report displays all three levels of Operators that have been defined in the E-Plex FIPS-201 software.

The screenshot shows a software window titled "View Reports". On the left is a sidebar with the following controls:

- "Choose a Report" dropdown menu set to "Operators".
- "Sort By" section:
  - "Choose a Column to sort on" dropdown menu set to "Last Name".
  - "Choose the direction(order) of sort" section with two radio buttons: "Ascending (From A to Z)" (selected) and "Descending (From Z to A)".
- "Generate" button.
- "PDF" dropdown menu.
- "Export" button.

The main report area displays the KABA logo and "KabaAccessControl". Below the logo, it shows the date and time: "Monday, November 16, 2009 11:35 AM". To the right of the date, it says "Total Operators:". Below this is a table with the following data:

<u>Last Name</u>	<u>First Name</u>	<u>Login Name</u>	<u>Operator Level</u>
Roberts	Carla	carla	2
Thomas	Jawa	ilco	1

At the bottom of the window, there is a status bar with the following information: "Current Page No.: 1", "Total Page No.: 1", and "Zoom Factor: 100%".

From this window, you can print and export/save the Operators report.

# Systems Activity Log Report

The Systems Activity Log Report displays all Operators' activity in the E-Plex FIPS-201 system software.

**View Reports**

Choose a Report  
System Activity Log

**Filter By**

Operator  
All Operators

Activity Start Date  
Friday, October 02, 2009

Activity End Date  
Monday, November 16, 2009

**Sort By**

Choose a Column to sort on  
Activity Date

Choose the direction(order) of sort  
 Ascending (From A to Z)  
 Descending (From Z to A)

Generate

PDF

Export

**Main Report**

**KABA**  
KabaAccessControl

**System Activity Log Report**

Monday, November 16, 2009 11:41 AM Total System Activity Logs: 91

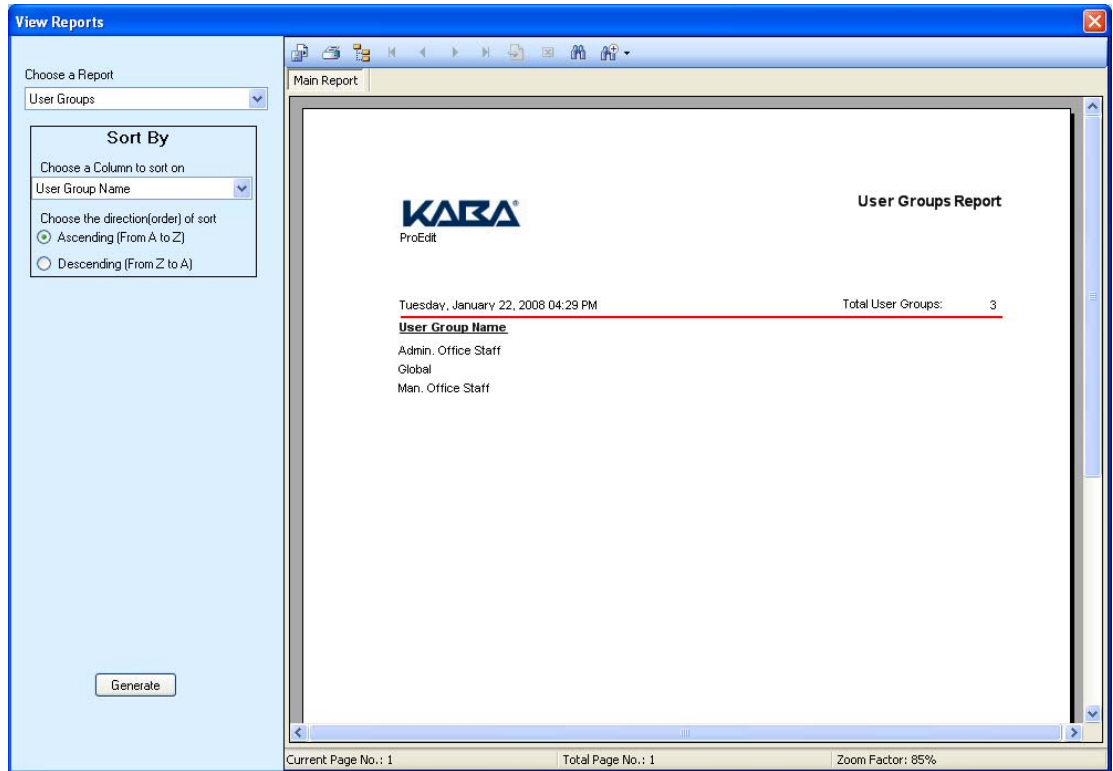
Activity Date	Event	Description	Operator	Login Level
10/ 2/2009 10:08 AM	Operator Login/Logout	Operator Login	1	ilco
10/ 2/2009 10:18 AM	Database Management	Backup Database	1	ilco
10/ 2/2009 10:18 AM	Operator Login/Logout	Operator Logout	1	ilco
10/20/200902:27 PM	Operator Login/Logout	Operator Login	1	ilco
10/20/200902:29 PM	Operator Login/Logout	Operator Logout	1	ilco
10/21/200902:35 PM	Operator Login/Logout	Operator Login	1	ilco
10/21/200902:36 PM	Users Operations	Add User	1	ilco
10/21/200902:37 PM	Users Operations	Modify User	1	ilco
10/21/200902:37 PM	Users Operations	Add Keycard	1	ilco
10/21/200902:38 PM	Users Operations	Add Keycard	1	ilco
10/21/200902:38 PM	Users Operations	Modify User	1	ilco
10/21/200902:38 PM	Users Operations	Add Keycard	1	ilco
10/21/200902:39 PM	Users Operations	Add Keycard	1	ilco
10/21/200902:39 PM	Users Operations	Add Keycard	1	ilco
10/21/200902:39 PM	Users Operations	Add Keycard	1	ilco
10/21/200902:41 PM	Users Operations	View Report	1	ilco
10/21/200902:42 PM	Users Operations	Delete User	1	ilco
10/21/200902:43 PM	Users Operations	Modify User	1	ilco
10/21/200902:44 PM	Users Operations	Modify User	1	ilco
10/21/200902:47 PM	Site Configuration	Add Access Group	1	ilco
10/21/200902:47 PM	Users Operations	Modify User	1	ilco
10/21/200902:48 PM	Operator Login/Logout	Operator Logout	1	ilco
10/21/200902:59 PM	Operator Login/Logout	Operator Login	1	ilco
10/21/200903:00 PM	Users Operations	Add User	1	ilco

Current Page No.: 1 Total Page No.: 2 Zoom Factor: 100%

From this window, you can print and export/save the Systems Activity Log Report.

# Departments Report

The Departments (User Groups) report displays all departments defined in the E-Plex FIPS-201 software.



From this window, you can print and export/save the Departments report.

# Users Report

The Users report displays all users, up to a million defined in the E-Plex FIPS-201 software.

The screenshot shows the 'View Reports' window with the 'Users' report selected. The sidebar on the left contains a 'Filter By' section with a checkbox for 'Show only Revoked Users' and a 'Sort By' section with a dropdown for 'Last Name' and radio buttons for 'Ascending (From A to Z)' and 'Descending (From Z to A)'. A 'Generate' button is at the bottom of the sidebar. The main report area displays the KABA ProEdit logo and the date 'Tuesday, January 22, 2008 03:36 PM'. The report is divided into two sections: 'Admin. Office Staff' (Total Users: 1) and 'Global' (Total Users: 3). The table below shows the user details for each group.

Admin. Office Staff							
Total Users: 1							
Last Name	First Name	User Type	Card ID	Card Type	Card Count	Valid From	Valid To
Pickens	LaToya	Access	04541551001F80	DESFire Permanent Card	2	1/22/08 11:21 am	1/22/09 11:21 am

Global							
Total Users: 3							
Last Name	First Name	User Type	Card ID	Card Type	Card Count	Valid From	Valid To
Davis	Tiffany	Manager	04142951001F80	DESFire Permanent Card	2	1/4/08 2:14 pm	1/4/09 2:14 pm
Griesbeck	Daniel	Master	04682B59001F80	DESFire Permanent Card	1	1/22/08 1:04 pm	1/22/09 1:04 pm
Jackie	Henson	Manager	040F3A51001F80	DESFire Permanent Card	1	1/22/08 9:13 am	1/22/09 9:13 am

From this window, you can print and export/save the Users report.

# Users for a Door Report

The Users for a Door report allows you view all users assigned to a particular door in the E-Plex FIPS-201 software.

**View Reports**

Choose a Report  
Users for a Door

**Filter By**

Door Groups  
Choose a Door Group

Doors  
Choose a Door

**Sort By**

Choose a Column to sort on  
Last Name

Choose the direction(order) of sort  
 Ascending (From A to Z)  
 Descending (From Z to A)

Generate

**KABA**  
ProEdit

Tuesday, January 22, 2008 04:51 PM

Door Name	Door Group	Lock Function	Passage Mode
<b>Main Hall Closet</b>	Storage Closets	Entry Lock	
Total Users: 2			
Last Name	First Name	Card ID	Card Type
Davis	Tiffany	04142951001F80	DESFire Permanent Card
Jackie	Henson	040F3A51001F80	DESFire Permanent Card
Card Count	User PIN	User Type	
2	11611701	Manager	
1	9281	Manager	
Door Name	Door Group	Lock Function	Passage Mode
<b>Office 1</b>	Staff Offices	Entry Lock	
Total Users: 3			
Last Name	First Name	Card ID	Card Type
Davis	Tiffany	04142951001F80	DESFire Permanent Card
Jackie	Henson	040F3A51001F80	DESFire Permanent Card
Pickens	LaToya	04541551001F80	DESFire Permanent Card
Card Count	User PIN	User Type	
2	11611701	Manager	
1	9281	Manager	
2	3578	Access	

Current Page No.: 1 | Total Page No.: 1 | Zoom Factor: 85%

From this window, you can print and export/save the Users for a Door report.

# Users Without an Active Card Report

The Users Without an Active Card report displays all users that have been defined in the E-Plex FIPS-201 software but have not been assigned either permanent or temporary cards yet.

**View Reports**

Choose a Report  
Users Without a Card

**Sort By**  
Choose a Column to sort on  
Last Name  
Choose the direction(order) of sort  
 Ascending (From A to Z)  
 Descending (From Z to A)

**Main Report**

**KABA ProEdit**

**Users Without a Card**

Tuesday, January 22, 2008 04:54 PM Total Users

Group Name	Total Users: 1			
Last Name	First Name	User Type	Valid From	Valid To
Samuels	Shane	Access	1/22/08 4:54 pm	1/22/08 4:54 pm
Group Name	Total Users: 1			
Last Name	First Name	User Type	Valid From	Valid To
Thomas	Jawa	Manager	1/22/08 11:36 am	1/22/09 11:36 am

Generate

Current Page No.: 1 | Total Page No.: 1 | Zoom Factor: 85%

From this window, you can print and export/save the Users Without a Card report.



# 4 Operating the E-Plex Lock at its Keypad

This section describes how to operate the E-Plex 5800 lock at the lock keypad, including the following topics:

- Overview of the Lock
- Configuring the Lock Functions
- Initial Programming of the Lock

# Overview of the Lock

---

This section provides an overview of the lock, including the following topics:

- States of the Lock
- Battery Life and Replacement
- **Sequence of Operations**
- Default Values of the E-Plex 5800 Lock Programmable Parameters

## States of the Lock

There are four states of the lock: Factory Mode, Access Mode by “LearnLok”, Access mode Software, and Pushbutton Programming Mode.

### *Factory Mode*

The Factory Mode is one of three primary states of the E-Plex 5800 locks. The main characteristics of this state include the following:

- The E-Plex 5800 opens only when the 8-digit factory default Master PIN 1-2-3-4-5-6-7-8 is entered at the lock keypad.
- The visual indication for “access granted” is the green LED flashing once. A high-pitched tone is also generated while the green LED is on.
- The Master User must change this factory default Master PIN to be able to exit permanently from the Factory Mode and switch to the normal Access Mode and/or the Pushbutton Programming Mode of operations.

### *Access Mode by “LearnLok”*

- The Access Mode by “LearnLok” refers to a lock that is operational for user access after the factory default Master PIN of 12345678 is changed to something else. When the lock enters the Access Mode in LearnLok mode, the Master (and Manager users) can add or delete regular users in the lock simply by entering relevant command codes at the lock keypad. Please refer to the “**E-Plex 58xx FIPS Lock Series Operations Manual**” for details.

### *Access Mode by Software*

- The Access Mode by Software refers to a lock that is operational for user access AFTER it is programmed by the M-Unit with its lock/user configuration data downloaded from the E-Plex FIPS-201 system software. When the lock enters the Access Mode, the method of lock access is either Smartcard only or PIN followed by the associated Smartcard. However, optionally you can assign certain Service users with PIN only access, if required.
- ***Important:*** From now on, all “LearnLok” specific lock keypad commands to add/delete users at the lock without software and PDA will not work in the lock. That is, the lock can be operated only in conjunction with software, from now on.

### *Pushbutton Programming Mode*

The E-Plex 5800 enters the Pushbutton Programming Mode when the Master user or one of the Manager users (or an M-Unit user) enters the # key first on the lock keypad,

followed by presenting the credential (card or PIN followed by card) to put the lock in programming mode.(for example, # credential). Once the E-Plex 5800 is in the Pushbutton Programming Mode, the Master/Manager can enter one or more command sequences. Each command sequence ends with a # that acts like an <enter> button on a PC keyboard. At the very end of all sequences of programming commands, enter one more # to remove the lock from the Pushbutton Programming Mode to return to the normal Access Mode.

## Battery Life and Replacement

The E-Plex 5800 locks use four “AA” alkaline batteries. A variety of factors will determine how long your lock operates on a set of batteries, including the following:

- Shelf life of the batteries
- Number of openings per day
- Environmental conditions
- Battery brand
- Access credential settings (Smart Card only or both PIN & Smart Card)
- Lock parameter settings

In ideal conditions, you can expect up to 60,000 openings using four “AA” alkaline batteries.

A flash of both red and green LEDs identifies a low battery condition when a valid credential (Smart Card or PIN and Smart Card) is presented, and the lock will still open. The lock will keep operating for another thousand or so openings but the batteries must be replaced as soon as possible when you observe a low battery condition,

### *Battery Pack Replacement*

Always replace all four batteries in the pack with good quality, AA alkaline batteries. If you replace the batteries within two to three minutes, the lock will continue working as before, granting and denying access to users based on their access schedules.

If the battery replacement time is longer than two to three minutes, you may lose the current date and time of the lock, even though all user and lock configuration parameter information will not be lost. When the lock loses its date/time, all of your access schedule times will be out of sync, thus denying access to valid users. In this case, you **MUST** update the lock’s date/time with the current date/time. To update the current date & time you can either use the lock keypad command sequences 001# and 002# along with their date and time parameters or simply re-program this lock with its proper lock ID using the M-Unit. This is described in Chapter 5: Programming and Auditing Locks under the section “Programming Locks”

---

***Important:*** Please ensure that your M-Unit’s current date and time are set correctly before synchronizing with the lock. If you forget to update the date/time, the lock will keep flashing the red LED every 10 seconds as a reminder until the lock’s date/time is updated.

***Note:*** In rare instances, when you reconnect the lock with new batteries, the lock may not re-initialize properly; a typical symptom is that the lock does not recognize any pushbutton input. If this happens, disconnect the battery pack, press any one of the pushbuttons for a minimum of 2 seconds to discharge the built-in circuit capacitance, and then re-connect the battery pack. Wait a couple of seconds until you see the green LED flash once, followed by the sound of the motor crunching and a high pitched beep indicating that the lock has re-initialized properly.

---

# Sequence of Operations

This section describes the sequence of operations for accessing and programming the E-Plex 5800 lock.

With the E-Plex 5800 in Factory Mode, do the following:

- Program the lock function of the lock if you want it to be anything other than the factory default “Entry” function.

## Configuring the Lock Functions

---

Before putting the lock in service, you must first program the lock function when still in Factory Mode. The default lock function for any lock from the factory is “Entry” lock function, which is the same as a Cylindrical lock without a privacy thumbturn, a Mortise lock without a deadbolt, or an Exit Trim lock. The command codes involved here are 011# and 013#.

---

**Note:** Refer to the separate “E-Plex 5X00 Lock Function Setup Guide” for instructions on changing to the desired BHMA lock function.

---

- Change factory master combination to your own master code (always eight digits) to place lock in Access Mode.

The lock is now “activated” and can be programmed using the M-Unit. For Error! Reference source not found. using the M-Unit, refer to Chapter 5.

## Default Values of the E-Plex 5800 Lock Programmable Parameters

Parameters	Factory Default Values
Date (MM/DD/YY)	01/01/00
Time (HH:MM)	00:00
Lock state	Un-programmed
Lock function	Entry
Manual Passage Mode open time limit	Four hours
Passage Mode	Disabled
Lockout Mode	Disabled
Unlock time	Two seconds
Buzzer volume control	Low
Tamper shutdown time	30 seconds
Tamper attempt count	Four attempts
Access code length	Four digits
Master PIN	12345678 (Eight digits)
M-Unit User's status	Disabled
Remote unlock	Disabled

# Initial Programming of the Lock

---

Once the required lock function is set, the lock must be programmed before daily use. This section provides information about the initial programming of the lock, including the following:

- Entering Pushbutton Programming Mode
- Modifying the Master User PIN
- Additional Pushbutton Keypad Commands
- Resetting the Lock
- Summary of Pushbutton Programming Commands
- Visual Feedback Message Definitions

## Entering Pushbutton Programming Mode

This section describes the sequence of tasks to program the lock at the keypad in Pushbutton Programming Mode.

- Put the lock in Pushbutton Programming Mode by pressing **# Master or Manager Credential**.
- Use the **Summary of Pushbutton Programming Commands** table on page 8 of this Chapter to enter the three digit command sequence (command type + function code), followed by **#**.
- Enter the appropriate numbers as required.
- Press **#** to end Pushbutton Programming Mode.
- Once the lock is in Pushbutton Programming Mode, multiple command sequences can be entered without having to repeat the **# Credential**. However, if there is no activity for 5 seconds at the keypad, the lock will automatically exit from Pushbutton Programming Mode.

### Example

- If the Master or Manager User presents her/his credential the door will open.
- If he or she enters **#Credential**, the lock will enter into the Pushbutton Programming Mode and wait for the next part of the command.
- If he or she enters **#** at the end of the code, for example **#Credential#**, the lock will go out of Pushbutton Programming Mode and return to its normal Access mode.

---

**Note 1:** The # (pound sign) acts like the Enter key on a keyboard in your communications with the lock. The # tells the lock that one part of the entry is finished. The # serves another purpose—to distinguish a programming type command from a simple access code to open the door. A Master or Manager User can use the same Credential to open the door or to put the lock in Pushbutton Programming Mode, the only difference being that he or she uses the # sign in front to signal that he or she is about to enter a programming command.

**Note 2: Correct errors during a command sequence.** If an invalid entry occurs, recover from the mistake by entering the (\*) key, which will clear all entries made from the beginning of the current command sequence and will reset the 5-second time limit for entering the code. In this case, you still have 15 seconds from the first number entered to enter the whole code.

---

# Modifying the Master User PIN

## Required User Level: Master

To change the factory code or current Master code, follow these steps:

- Put lock into Pushbutton Programming Mode.
- Use the command, **000**, for Master, and then enter the new Master code number.
- You must use eight digits between 00000000 and 99999999 as follows: **000#MMMMMMMM#**; for example, **000#87654321#**.
- Enter the Master code again: **87654321#** for confirmation.  
Example of complete entry: **000# 87654321# 87654321#**.
- Key in another # to indicate the end of Pushbutton Programming Mode.
- After you are finished, you will always have to use this Master code followed by presenting your Master Smart card, if the access credential for this access schedule calls for dual credential access. Please write down the PIN and keep in a safe place. You should enter this same 8-digit Master PIN in the E-Plex FIPS-201 software configuration screen also to be consistent. The factory code is no longer valid.

# Additional Pushbutton Keypad Commands

The following operations can only be performed at the lock's keypad. All other functions must be set up and sent from the E-Plex FIPS-201 software through the M-Unit:

- Setting date and time (commands 001# and 002#)
- Activating/de-activating Passage Mode (command 399#)
- Increasing/decreasing programmed Passage Mode duration (command 005#)
- Activating/de-activating global Lockout Mode (command 499#)
- Performing manual diagnostics (command 500#)
- Identifying an E-Plex lock model (command 501#)
- Start M-Unit communication session with the lock (command 900#)

## *Setting Date and Time (Commands 001# and 002#)*

The following two commands are performed one after the other in sequence to set the lock with current date and time. The factory default is 01/01/2000 when you first connect the battery and so must be changed to reflect the actual current date & time.

### Required User Level: Master

- Put the lock into Pushbutton Programming Mode.
- Enter command **001#** followed by MMDDYY# and again MMDDYY#, where MM=01 to 12 (Month), DD=01 to 31 (Day) and YY=08 to 99 (Year).
- Enter command **002#** followed by HHMM# and again HHMM#, where HH=00 to 23 (Hour) and MM=00 to 59 (Minute).
- Enter another # to indicate the end of programming.

---

**Note:** *The date and time can also be set by the M-Unit. Whenever you program the lock with the M-Unit, the M-Unit automatically sends the current date, time and the DST setting from the PDA's settings to the lock.*

---

## Activating/De-activating Passage Mode (Command 399#)

You have already set up in the software a duration for a lock to remain in manual Passage Mode (default is 4 hours) and enabled it. When you activate manual Passage Mode at the lock keypad, it becomes active for the duration you have set in the software. If your duration is setup as six hours, and you manually activate Passage Mode at 10:00 a.m., it will automatically re-lock at 4:00 p.m. Even if the lock was taken in and out of Passage Mode multiple times during the six-hour period, it will still re-lock after six hours from the original starting period. This ensures that a lock will never remain in Passage Mode beyond the programmed time period.

---

**Note:** This manual Passage Mode function is different than the automatic access schedule-based Passage Mode setup in the software.

---

### Required User Level: Master, Manager

1. Put the lock into Pushbutton Programming Mode.
2. Enter command **399#** to activate/de-activate Passage Mode.
  - Enter the code where **1** = activate Passage Mode and **0** = de-activate Passage Mode.  
An example of complete entry to activate Passage Mode is **399#1#** and to de-activate Passage Mode, it is **399#0#**.
  - Enter another **#** to indicate the end of Pushbutton Programming Mode.

## Increasing/Decreasing Passage Mode Duration Temporarily (Command 005#)

As in the above example, say your manual passage mode duration is programmed for duration of six hours. So if you manually activated Passage Mode at 10:00 a.m., it will automatically re-lock at 4:00 p.m. However, there may be times when you may want to either shorten or prolong this remaining passage mode duration temporarily on that day (only) by a few hours. You can do this but you must enter this command sequence before the expiry of the current passage mode end time. Keep in mind that the next day onwards, the manual passage mode duration that was set originally will take effect again.

### Required User Level: Master, Manager

1. Put the lock into Pushbutton Programming Mode.
2. Enter command **005# HH#** where HH=01 to 24 hours.  
Let us take the same example as before -> activate manual passage at 10 a.m. so that it will automatically end at 4 p.m. after 6 hours. But if you want to temporarily shorten the current duration by say, 1 hour to end at 3 p.m., then you must enter HH=01 at 2:00 p.m.  
Similarly, if you want to temporarily extend the current duration by say, 2 more hours to end at 6 p.m., then you must enter HH=02 at 4:00 p.m.
3. Enter another **#** to indicate the end of Pushbutton Programming Mode.

## Activating/De-activating Lockout Mode (Command 499#)

You may need to use the global Lockout Mode, for example, during a fire or fire drill when you do not want anyone to return to his or her office. This procedure will de-activate all regular user access credentials that are active, including Manager credentials, but excluding the Master credential.

**Required User Level: Master**

- Put the lock into Pushbutton Programming Mode.
- Enter command **499#** for Lockout Mode (all except Master).
- Enter **1#** to activate Lockout Mode and **0#** to disable it.  
Example of complete entry: **499#1#** or **499#0#**.
- Enter another # to indicate the end of programming.
- You have now activated or de-activated Lockout Mode.

### *Performing Manual Diagnostics (Command 500#)*

Use the diagnostics code to perform manual diagnostics of the lock, green LED, red LED, buzzer, and the 12 pushbuttons—0 through 9, \*, and #.

**Required User Level: Master, Manager**

- Put the lock into Pushbutton Programming Mode.
- Enter command **500#** for diagnostics. You will see a green LED and hear a high beep followed by a red LED and a low beep.
- Press **123456789\*0#**, in that exact order, to test each pushbutton. If every pushbutton is working correctly, you will see a green LED and hear a normal beep for each pushbutton that is pressed.  
Example of a complete entry: **500#123456789\*0#**.
- Enter another # to indicate the end of programming.
- If you see a red LED at any time that you are pressing a pushbutton, or at the end of the code, there could be a problem with the pushbuttons.
- Enter another # to indicate the end of programming.
- If you still see the red LED, the lock has a problem. Call a service person to repair or replace the lock.

### *Identifying a Lock Model (Command 501#)*

Use the Lock Model Identification code to identify if the lock model is E-Plex 5800.

**Required User Level: Master, Manager**

- Put the lock into Pushbutton Programming Mode.
- Enter command **501#** for Lock Model Identification.
- The lock will flash the red and green LEDs eight times with accompanying high-pitched tones to indicate that this is an E-Plex 5800 lock.
- Enter another # to indicate end of programming.

## **Resetting the Lock**

You can return to factory default parameters by performing a Hard Reset. This returns the lock to Factory Mode, including deleting all credentials, putting the lock back to factory default values (four-digit access PIN length), and making the Master PIN **12345678**. Also, the lock function will revert to the default “Entry” lock function. A hard reset is performed as follows:

- Insert the mechanical override key, turn to retract latch, and hold in (lock) open position.
- Within five seconds, press # and then release the key.
- While red/green lights flash alternately, press **12345678#** on keypad.



- The lock will reset. You will see two flashes of the green light with a corresponding high pitch tone, followed by the sound of the lock motor “crunch,” indicating that the reset is successful.
- The lock is now reset to the Factory Mode and the Master PIN is now 12345678.

---

**Note:** The hard reset operation does NOT delete any audited events stored in the lock, for security reasons.

---

## Summary of Pushbutton Programming Commands

Name	Command	Description	Authorization
Configuration	000 # MMMMMMMM# MMMMMMMM#	Modify Master User PIN (always eight digits)	Master
Set Date	001# MMDDYY# MMDDYY#	Setup current Date MM = 01 or 12; DD = 01 to 31; YY = 08 to 99	Master, Manager
Set Time	002# HHMM# HHMM#	Setup current t Time HH = 00 or 23; MM = 00 to 59	Master, Manager
Set Temporary Passage Mode Duration	005# HH#	Setup Temporary Passage mode Duration HH = 00 or 24	Master, Manager
Manual Passage Mode	399# P#	Activate/de-activate Passage Mode P = 0 or 1; 0 = disable Passage Mode; 1 = enable Passage Mode	Master, Manager
Global Lockout Mode	499#  L#	Activate/de-activate Lockout Mode (Master User is not affected by global Lockout Mode) L = 0 or 1; 0 = disable Lockout Mode; 1 = enable Lockout Mode	Master
Diagnostics	500# 123456789*0#	Manual diagnostics	Master, Manager
Lock Model Identification	501#	Identify if the lock is an E-Plex 5800: Eight sets of green and red LEDs flash for E-Plex 5800.	Master, Manager
Communication Startup	900#	IrDa Communication startup between the lock and M-Unit PDA	Master, Manager

## Visual Feedback Message Definitions

Condition	Parameters			
	Green LED	Red LED	Duration	Rate
Valid pushbutton pressed	ON	OFF	1/10 sec	Once
Timeout expired	OFF	ON	1 sec	Once
Valid credential	ON	OFF	1 sec	Once

Condition	Parameters			
	Green LED	Red LED	Duration	Rate
presented				
Access granted	ON	OFF	1/10 sec	1 sec
Access granted (battery low condition)	ON	ON	1/10 sec	1 sec
Access denied	OFF	ON	1 sec	Once
Valid programming entry	ON	OFF	1 sec	Once
Invalid programming entry (including duplicate access code)	OFF	ON	1 sec	Once
Tamper shutdown beginning	OFF	ON	2 sec	Once
Tamper shutdown state	OFF	ON	1 sec	10 Sec
Tamper shutdown ending	ON	OFF	2 sec	Once
Communication starting	ON	OFF	1 sec	Once
Communication ending	ON	OFF	1 sec	Once
Communication aborted	OFF	ON	1 sec	Once
Communication in progress	ON (Alternate)	ON (Alternate)	1/10 sec	1 Sec
Hard Reset sequence in progress	ON (Alternate)	ON (Alternate)	1/2 sec	Continuously
Hard Reset sequence successful	ON	OFF	2 sec	Once
Hard Reset sequence failed	OFF	ON	2 sec	Once
On first battery connect (Power up sequence)	ON	OFF	2 sec	Once
Deadbolt / Privacy On	OFF	ON	1 sec	Once
Deadbolt / Privacy Off	ON	OFF	1 sec	Once
Invalid or erratic Clock	OFF	ON	1/20 sec	10 Sec
Battery is about to go Dead (fully discharged)	OFF	ON	2 sec	Once

# 5 Programming and Auditing Locks

A PC based Maintenance Unit called the “M-Unit” – this can be either, (i) the same laptop PC where the FIPS-201 Client software has the PC M-Unit part of the software integrated within it, or (ii) a separate mini laptop / Netbook PC used as a portable device running the PC M-Unit part of the software only. The main two functions of the portable M-Unit are:

- to send (upload) data to for the purpose of programming a lock, and
- to receive (download) data from the lock for the purpose of auditing the lock’s events.

The data transfer between the portable M-Unit and the E-Plex 5800 lock is via the industry standard IrDa interface, working in conjunction with ***Kaba’s E-Plex PC M-Unit Communications Kit***.

# Portable PC M-Unit with Kaba's IrDA Kit

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The "M-Unit" is Kaba Access Control system's term for a PC based portable unit that communicates with the locks through industry standard infrared (IrDa) interface by making use of *Kaba' PC M-Unit Communications Kit*. The kit contains the following items in the package:



IrDa Adapter



USB Extension Cable



USB Flash Drive



Netbook PC (as portable M-Unit)

1. An industry standard **IrDA** (*Infrared Data Access*) **adapter** with a **USB interface** to connect to the M-Unit PC,
2. A **USB extension cable** to connect the above IrDA adapter to the M-Unit, if need be, and
3. A **USB flash drive**, preloaded with the *E-Plex PC M-Unit software* application along with its *User Guide* in electronic format,
4. A 2-page "Getting Started" sheet in color as a quick reference guide.

One end of the IrDA adapter plugs in to one of the M-Unit's USB ports and the other end of the IrDa transmit/receive infrared data window will be pointed at the E-Plex lock's IrDa window to transfer required data between the M-Unit and the lock.

The USB memory drive will be used (after installing the PC M-Unit software on the separate Netbook PC) to store and transfer the lock configuration data and the audited events data between the M-Unit and the Host PC where the main E-Plex Enterprise applications its locks/user access configuration database reside. The USB flash drive will be used as a portable transport medium between the two non-networked PCs – i.e., between the Host PC and the portable M-Unit.

Optionally, if your Host PC operates under a networked environment, either by **wired LAN** (Local Area Network) or by **wireless LAN**, you will not need the USB drive to transfer data between the Host and the M-Unit. You can simply make use of the **Host PC's IP address** to transfer data between the two PCs over the network.

**Important:** Please consult with your local IT personnel on how to setup your Host PC's network IP addressing and related schemes.

**Note:** If on the other hand, you use the same laptop which contains the main FIPS-201 applications and the M-Unit applications (built-in), you will not need the flash drive to transfer data; this is because this data transfer and syncing occur within the same laptop's hard-drive.

## PC M-Unit Software Installation

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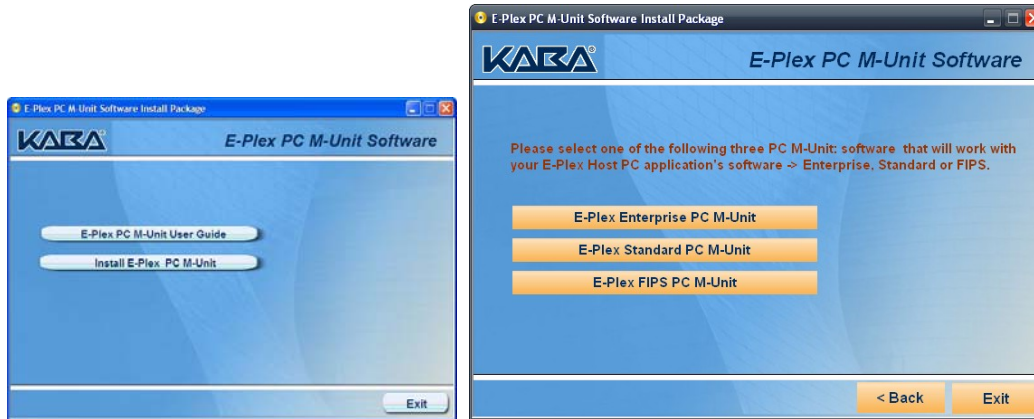
This procedure is for installing the PC M-Unit part of the software on the separate portable Netbook or mini laptop; the FIPS-201 applications software should have been already installed and running on the Host PC.

**Important:** If you are using one/same (“integrated”) portable PC where the *E-Plex FIPS-201* software was installed, you can skip the next few pages and go directly to the Section on **Page 5-9** -> **Automatic PC/M-Unit Sync**. This is because the *E-Plex PC M-Unit* part of the software already resides within the main FIPS-201 applications software and so no separate PC M-Unit installation is required.

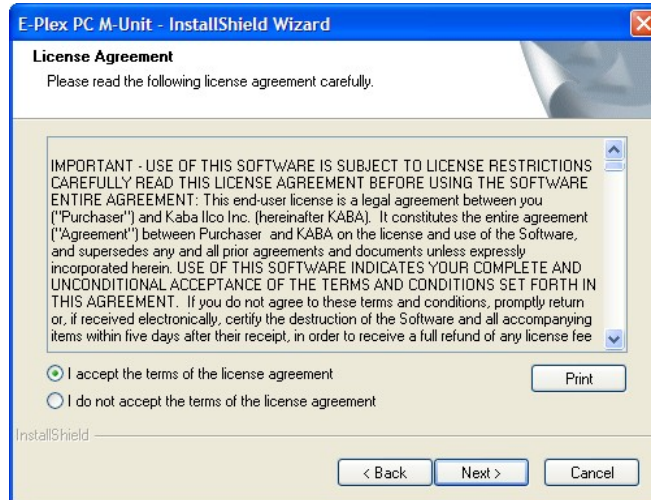
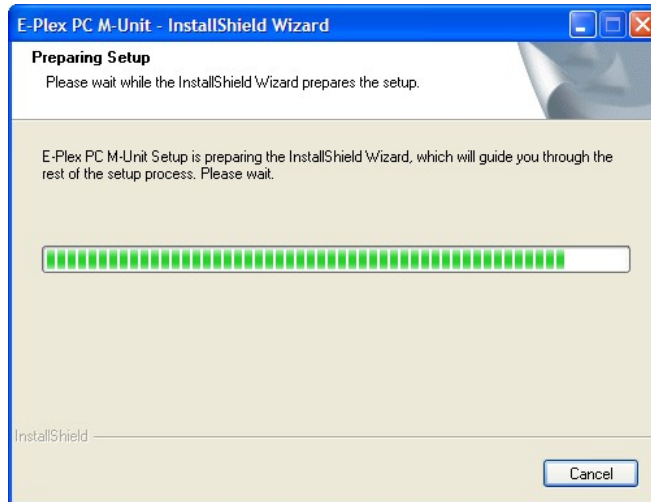
**Note:** This same PC M-Unit installation procedure can also be found in the **PC M-Unit User Guide**. It is shown here again in this document for convenience. Please also refer to the 2-page color, **E-Plex PC M-Unit Getting Started** sheet as a quick reference guide.

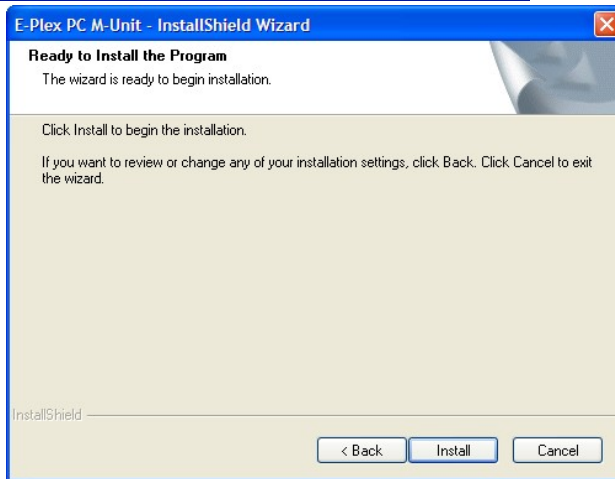
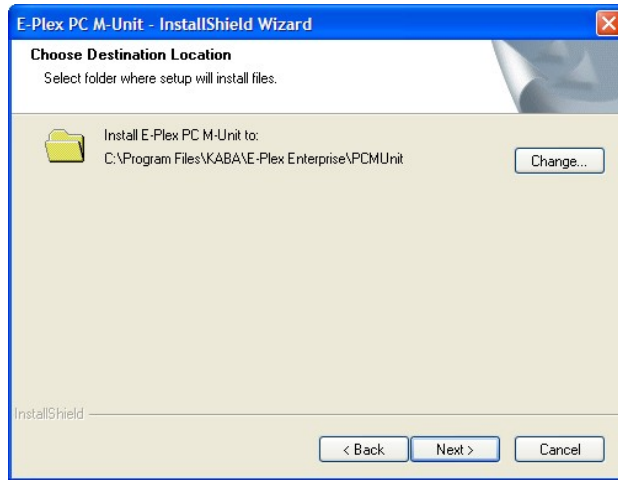
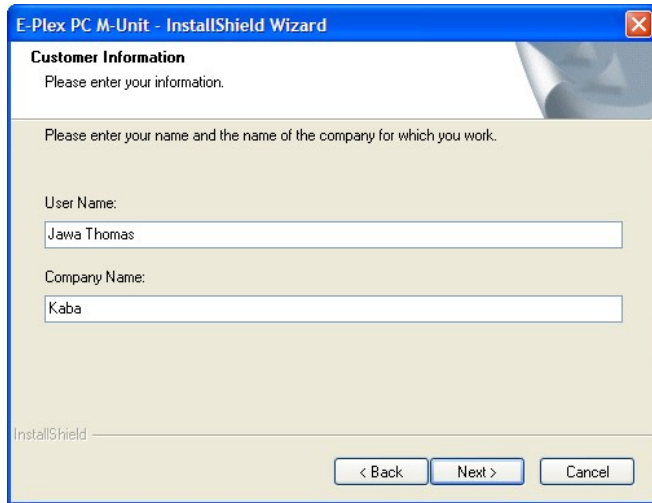
- The *E-Plex PC M-Unit Software* and the *PC M-Unit User Guide* are located on the USB flash drive that comes with *Kaba's PC M-Unit Communications Kit*.
- Plug in this USB drive into one of the USB ports of your dedicated M-Unit (Laptop or Netbook PC).
- In a few seconds, you will see the following screen on your M-Unit portable unit. Ensure that “*Show Kaba's E-Plex PC M-Unit Software ...*” is highlighted. Click **OK** to continue which will open the next window, giving you an option to either view/print the *PC M-Unit User Guide* or install this software.

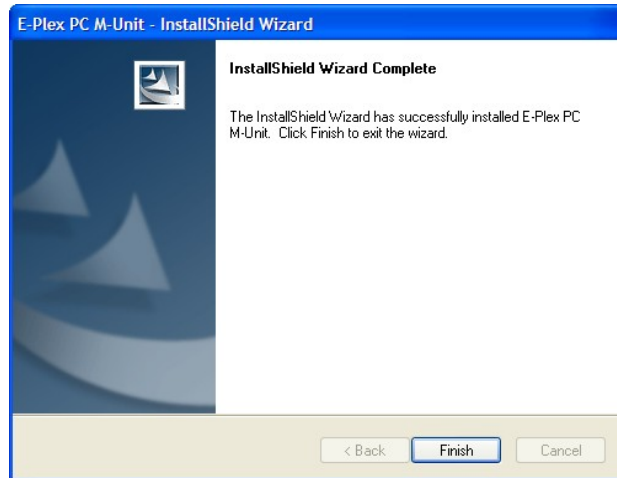




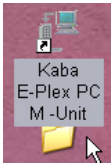
- Click “Install E-Plex PC M-Unit” and then select and click “**E-Plex FIPS PC M-Unit**”. The software installation process will begin and you need to just follow the instructions on the screen. The following are a few screen shots taken during the install process. Click *Finish* when done.







- The E-Plex PC M-Unit software is now installed on your separate M-Unit portable unit and the program's icon will be displayed on your PC M-Unit's Desktop as shown below. Whenever you want to run this program, double click on this icon.



- For the very first time of PC M-Unit login, the default login User name is "kaba" and the default Password is also "kaba". Please refer to the "*E-Plex PC M-Unit User Guide*" for detailed operational use of this program.
- The main operations involving the M-Unit are the following:
  - Downloading doors/users access configuration data to the M-Unit from the Host PC
  - Programming the doors (locks) using the M-Unit via IrDA
  - Auditing the doors (locks) using the M-Unit via IrDA
  - Uploading doors' configuration info and audits to the Host PC from the M-Unit
  - Performing lock maintenance/diagnostics via IrDA

Note: The functionality and features of the E-Plex PC M-Unit software is generic, so it will work with most of Kaba's E-Plex lock models and their related SACs (Stand-Alone Access Controllers) such as:

**E5800 Series** – with E-Plex FIPS-201 software (this software)  
**E3200, E3600, E3700, E5200, E5600, E5700 Series** – with E-Plex Enterprise software  
**E3000, E5000 Series** – with E-Plex Standard software

## M-Unit User Definition

- In addition to the global Master user, specific Door Group Managers and the other Manager users, there can be M-Unit user types who can also program and audit the E-Plex FIPS software based locks such as the E5800 using the M-Unit. This M-Unit user's credential is used only to program and/or audit the lock as a maintenance function only, ie. the M-Unit credential will NOT open the lock. When an M-Unit User presents her/his M-Unit credential, the lock enters the



Communications Mode with the M-Unit handheld immediately (equivalent to entering the command sequence: # Master credential # 900 #, or # Manager's credential # 900 #), indicated by alternate green and red flashing LEDs. Now the M-Unit User can program or audit the lock.

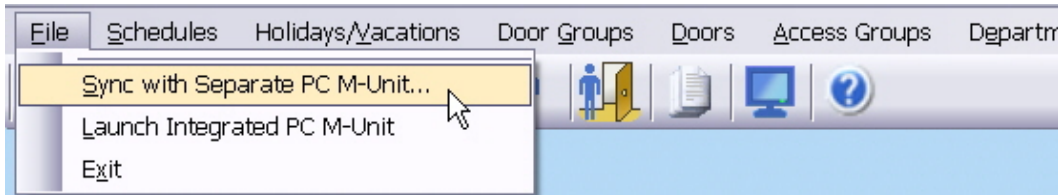
**Important:** *Ensure that the current date and time on your system PC and your portable M-Unit are accurate, including the Daylight Saving Time setup. If the date and time are not correct, your users will not be able to access the lock even if they have the right credentials.*

# Manual PC/M-Unit Sync (Data Transfer with “Separate” PC M-Unit via a USB flash drive)

---

You must perform the manual data transfer, both from the E-Plex FIPS-201 Host PC’s side and from the separate portable PC M-Unit’s side as described below. Ensure that both the E-Plex FIPS and the E-Plex PC M-Unit programs are running on both PCs (Host and M-Unit).

From the main menu of E-Plex FIPS-201 software, click **File** and then **Sync with Separate PC M-Unit...**



From this point on, please refer to the ***E-Plex PC M-Unit User Guide*** on how to perform the data transfer manually between the two devices via a USB flash drive. The E-Plex PC M-Unit user guide is included as an electronic document on the USB flash drive of the ***E-Plex PC M-Unit kit***.

Data Transfer via IP Addressing: The M-Unit data transfer between the Host PC and the PC M-Unit can also be performed via the Host PC’s IP address without having to use the USB flash memory drive. In this case, the data transfer is initiated only from the PC M-Unit side as “Download Doors” (to M-Unit) or as “Upload Audits” (to Host PC). The transferred data will be automatically stored, both in the Host PC’s and the M-Unit’s respective databases; no “initiate data transfer” action is necessary from the Host PC’s side. Please refer to the *E-Plex PC M-Unit User Guide* for more details on how to transfer data between the Host PC and the M-Unit via the IP Addressing scheme. You must have either wired or wireless network connection for the FIPS Host PC and the M-Unit for this IP address based data transfer to function.

Note: If on the other hand, you use one/same standalone laptop PC as one “integrated” PC to run both the FIPS-201 applications and the PC M-Unit applications, go to the next section -> ***Automatic PC/M-Unit Sync***.

## Automatic PC/M-Unit Sync (Data Transfer within the same “Integrated” Laptop PC which acts as both Host PC & PC M-Unit)

---

If you use one/same standalone laptop PC to run both the E-Plex FIPS-201 software as a Host PC and the PC M-Unit software (as a portable PC M-Unit), the system automatically does the data sync transfer without you having to specify and use a common folder location on the hard drive, or on the USB flash drive like you do with manual data sync transfer on a “separate” Netbook PC; also, no network connection is required. You will still need to connect and use the IrDA interface adapter with this laptop PC when programming and/or auditing an E-Plex 5800 lock. In this case, this same “integrated” laptop PC functions both as the Host PC running the E-Plex FIPS-201 software and as the portable PC M-Unit running the PC M-Unit software within.

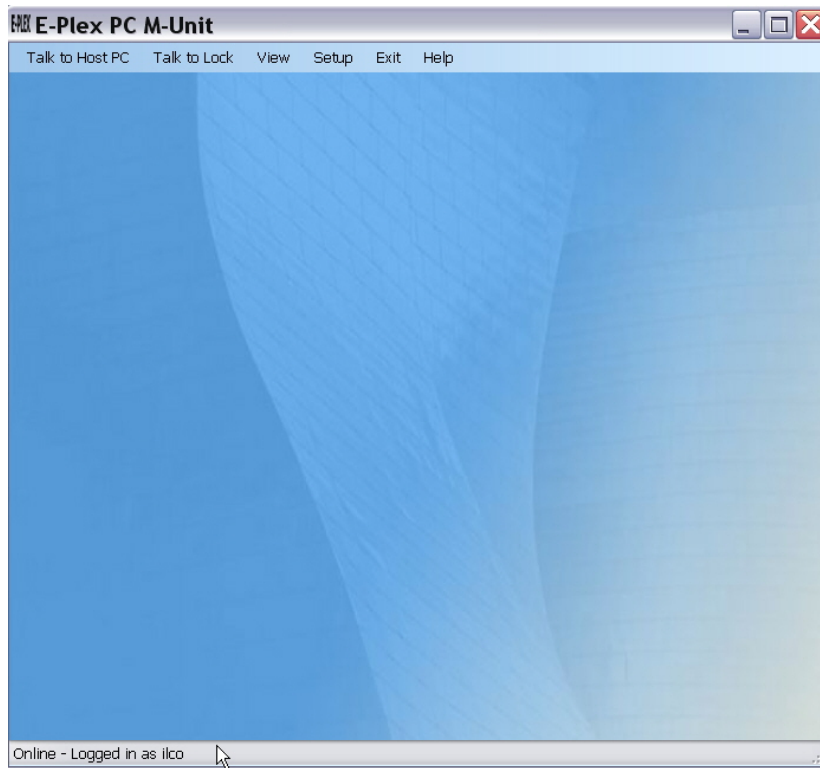
From the main menu of *E-Plex FIPS-201 software*, click **File** and then **Launch Integrated PC M-Unit** to open the main *PC M-Unit software* screen.



From this PC M-Unit menu you can,

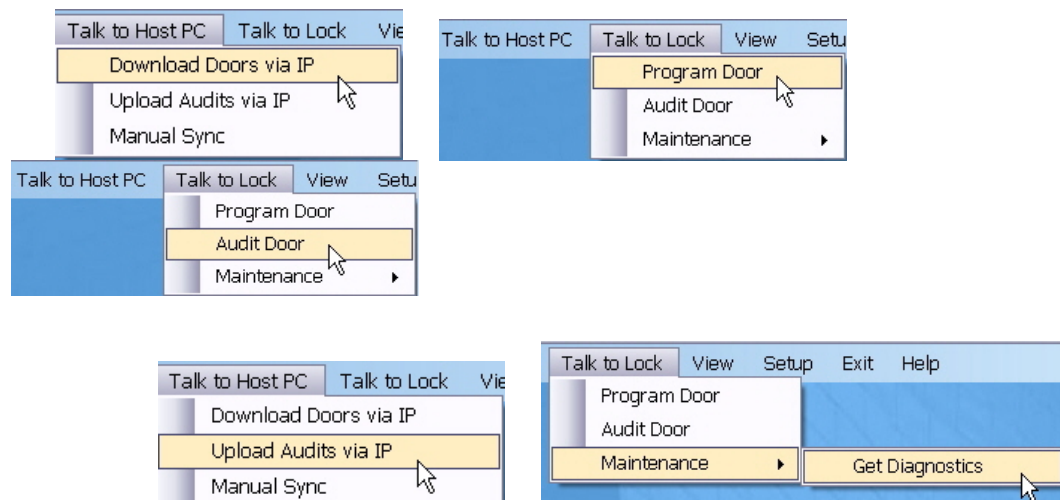
- (i) download users <-> locks access configuration data for each selected E-Plex lock from the Host PC,
- (ii) so as to program these locks,
- (iii) audit each lock for event transactions,
- (iv) then upload the audited info back to the Host PC to view/print them under the FIPS Reports menu, and/or
- (v) perform lock diagnostics.

**Note:** Whenever you need to “talk” (communicate) to the E-Plex 5800 lock, you must use Kaba’s IrDA communications (PC M-Unit) kit -> the IrDA dongle and its cable.



From this point on, please refer to the ***E-Plex PC M-Unit User Guide*** on how to perform the data transfer to perform the above tasks in more details. The E-Plex PC M-Unit user guide is included as an electronic document on the USB flash drive of the ***E-Plex PC M-Unit kit***.

The following are a few sample screens showing the PC M-Unit sub-menus from where you will launch the above five -> (i) through (v) tasks.



# 6

# Appendix

## ***Appendix-A: FIPS-201 Key Definitions***

This section gives brief explanations of a few key terminologies used in FIPS-201 related systems. Please review these definitions to better understand the different elements of the E-Plex 5800 lock and FIPS-201 system software.

# FIPS-201 Key Definitions

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## ***FIPS-201***

Federal Information Processing Standard, Publication 2.01, a technology standard for adoption and use by United States federal employees and contractors to achieve a very high degree of authentication of these users. Part of this standard also calls for the seamless interoperability of the FIPS-201 compliant smart ID user cards between various federal government agencies and related communities.

Encrypted FIPS-201 card ID info is stored on the “smart” chip of the card and contains the card holder’s unique identifier (CHUID), cryptographic pair of keys, digitized finger print templates; photograph, etc., so that the claimed identity of the card holder can be authenticated precisely.

## **Typical FIPS-201 Compliant Personal Identity Verification ID Cards Used by Various U.S. Federal Government Communities**

### ***CAC ( NG & EP)***

Common Access Credential, (Next Generation & End Point) – Used by the Department of Defense such as the military, the National Guard, etc.

### ***FRAC***

First Responder Authentication Credential – Used by fire, medical, law enforcement, and other emergency response personnel.

### ***TWIC***

Transportation Worker Identification Credential – Used by border security, port authority, airline passenger security control (Transportation Security Administration) personnel, etc.

### ***PIV***

Personal Identity Verification Credential – Used by all Federal employees and their contract workers.

### ***CHUID***

Card Holder Unique Identifier – This is a long unique number - typically from 1,000 to 2,000 bytes long and includes the FASC-N (see below) and all other mandatory PIV related data.

### ***FASC-N***

Federal Agency Smart Credential Number – This 40-digit long number contains the card holder’s credential number, the card issuing agency and system codes, cryptographic digital signature, card issuance and expiration dates, etc.

### ***PKI***

Public Key Infrastructure – An asymmetric cryptography support service to the PIV system that provides the private <-> public key pair needed to perform digital signature-based identity verification. It also protects storage of sensitive verification system data within the FIPS-201 compliant PIV ID card and communications between the card and the physical access control reader.

### ***CA***

Certification Authority – A trusted entity that issues and revokes public key certificates of the card user [Card Authentication Certificate and CRL].

### ***CRL***

Certificate Revocation List – A list of revoked public key certificates created and digitally signed by a CA and stored in OCSP server.

**OCSP**

Online Certificate Status Protocol – This online protocol is used to determine the status of the public key certificate and the status of the CRL. The user card enrolling station verifies online (through the Internet) this user status by communicating to a secure OCSP server.

# Appendix-B: Software Installation

This section describes the complete software installation process including the software registration and activation process.

There are two versions of the E-Plex FIPS-201 software: (i) a “**General**” version where the FIPS card authentication is performed without going through the internet to check with an external OCSP server, and (ii) an “**HIGH ASSURANCE**” version (Online Certificate Status Protocol) where the card’s authentication is performed via the internet by contacting a secure OCSP server – in this case, the FIPS compliant card is also verified for the card holder’s High Assurance mode status and her/his revocation status, if applicable.

**Note 1:** For the FIPS-General version of the software installation, you can simply select the “Standalone” Express installation on a single Standalone PC laptop where the user interaction will be minimal during interaction. It will automatically install the Server module and the Client module including the PC M-Unit component of the software on this PC. Please follow the self guided software install screen prompts for Express installation.

You may also, instead choose the “Network” Custom installation option if you are going to be working in a Server / Client networked environment.

**Note 2:** The software installation procedure for the “HIGH ASSURANCE” version of the E-Plex FIPS-201 software can be “Network” Custom install only. Here both the Server and the Client parts of the pre-requisite & final components of the modules, and also “CoreStreet’s Path Builder Server Validation Extension” Setting module will need to be installed. Careful user interaction will be required during installation and so you must follow the correct order/sequence of installation which is described in the “(Software) *Installation Procedure*” document that can be viewed from the software CD main menu.

**Important:** You must also install the Smartcard enroller driver software after installing the main E-Plex FIPS-201 software components.

## Software Registration and Licensing

### Software Licensing

Kaba Access Control’s E-Plex Enterprise software requires you to register your individually licensed copy of the software with Kaba Access Control in order to use the software. Registering the software will help secure your system database and the locks on your site and will also aid Kaba Access Control in making you aware of any new software upgrades, patches, etc. when required.

On the CD envelope of the E-Plex FIPS-201 software CD, you will see a sticker with a unique 6-digit *Serial Number* for the software which is part of **your unique 10-digit Site License Number**. Additionally, the second line of the label on the CD jewel case will be titled “*Site Private ID*” with a blank space against it. For easy reference, you can write down this 8-digit software security key (number) that you will be asked to enter when you login to the software system the very first time. This key is used in the system as part of a unique encryption key for your facility and can also be accessed from the “System Setup” menu.

The 10-digit unique Site License number contains your:

- (i) **Serial number** (6 digits, always unique),
- (ii) **Software Type** (1 digit: “1”= Full Featured version, ie., Not a Trial version),
- (iii) **Number of Seats** (2 digits: “25”= Unlimited). and
- (iv) **Software Product** (1 digit: “2” = FIPS-General; or, “0” = FIPS-HIGH ASSURANCE).



You will be required to enter the above digits of your Site License number which is printed on the sticker of the software CD envelope. (*Note:* The very last digit “2” or “0” for “Software Product” is not required to be entered),

The following are a few examples of End Users’ Site License number that you must enter to register the software. Note that only your 6-digit Serial number is unique; you must enter the “Software Type” as always “1” and the “Number of Seats” as always “25”, as shown on the software CD envelope sticker.

**112233 – 1 – 25**

**223344 – 1 – 25**

**334455 – 1 – 25**

The registration process is quite simple, and you can register the software in one of two ways:

- Register online at Kaba Access Control’s software registration website, anytime of the day or night (24/7), or
- Register by calling our Technical Support line at 800-849-8324 or 336-735-1331, Monday through Friday between 8:00 AM and 5:00 PM Eastern Standard Time.

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**Important:** You will not be able to install the software if you do not complete the registration process with Kaba Access Control.

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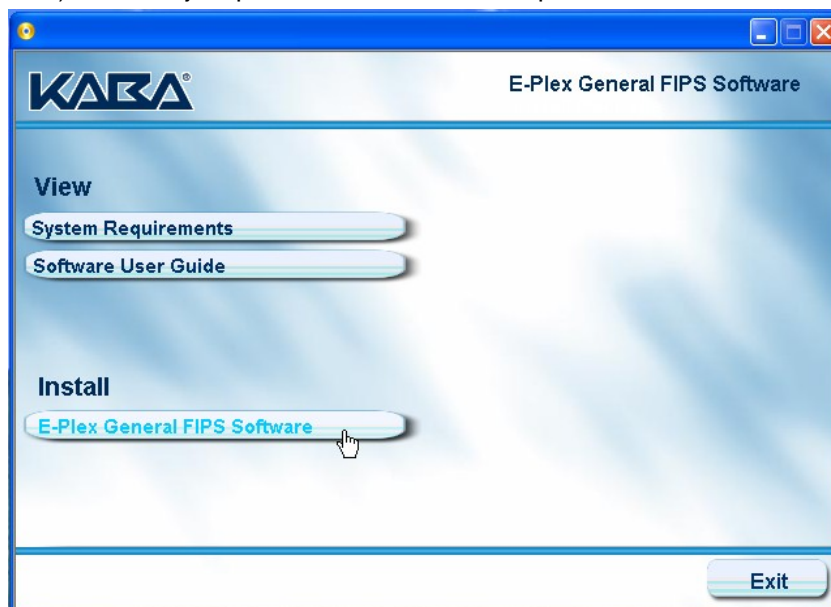
## **Software Registration**

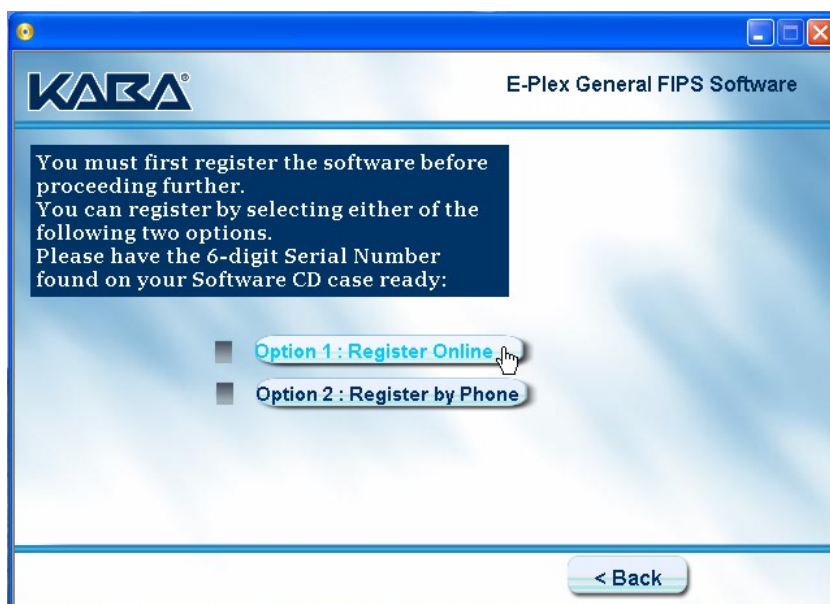
Complete the following steps to register the software:

- Insert the E-Plex FIPS-201 Installation CD into the appropriate drive of the PC.
- The E-Plex FIPS-201 Software Installation Browser loads and displays the **E-Plex FIPS-201 Access Control Software** browser menu.

### **For FIPS-General Software - Express Install on Stand-alone PC:**

- You will perform the *Express Install* where all the Server and Client related modules and the M-Unit modules will be installed *on one Stand-alone PC* without much user interaction. If you are going to be using one PC (no separate Server PC and other Client PCs) to do the job, please select this install option.



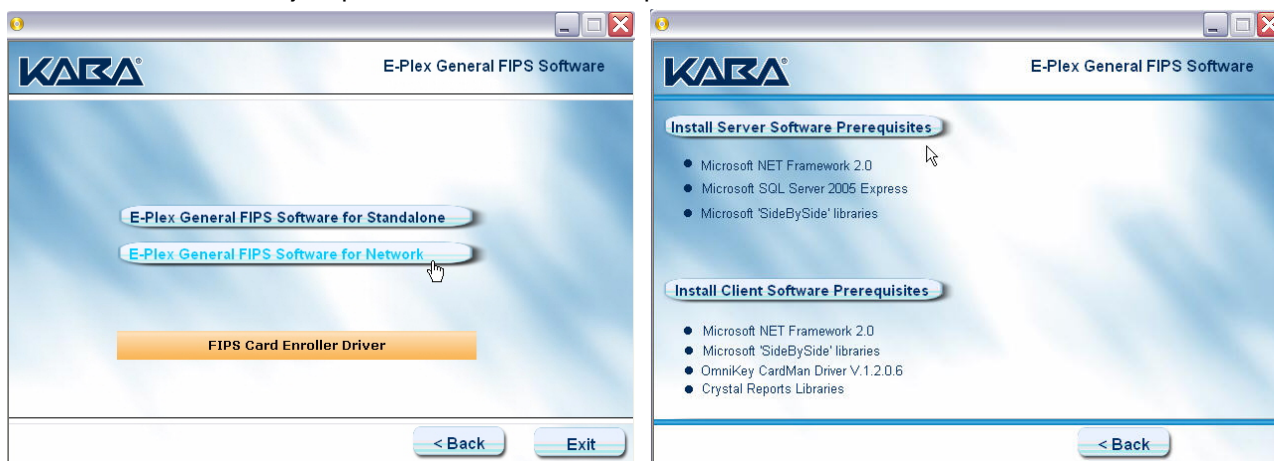


- Continue to **Option 1: Registering Through Kaba Access Control's Website.**

(Or),

#### For FIPS-General Software - Custom Install option for Network Environment:

- You will perform the *Custom Install* where all the Server and Client related pre-requisite and other modules and the M-Unit modules will be installed in a *networked environment*. User interaction will be required as per displayed prompts during the install process. If you are going to be using a separate Server PC and one or more other Client PC(s) to do the job, please select this install option.

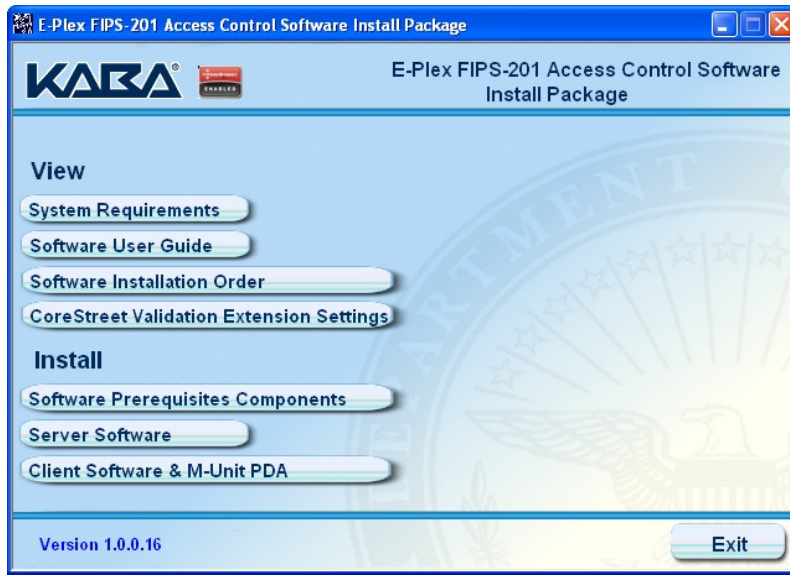


- **Note:** When you install the Server module, the install software will prompt you to register the software first. After registering the software, the actual software will be installed and follow the procedure as shown below for installing the FIPS-HIGH ASSURANCE software with Custom install option. The procedure is very similar, except you will not be installing the final CoreStreet's Path Builder related modules; this is applicable for the HIGH ASSURANCE version of the software only.

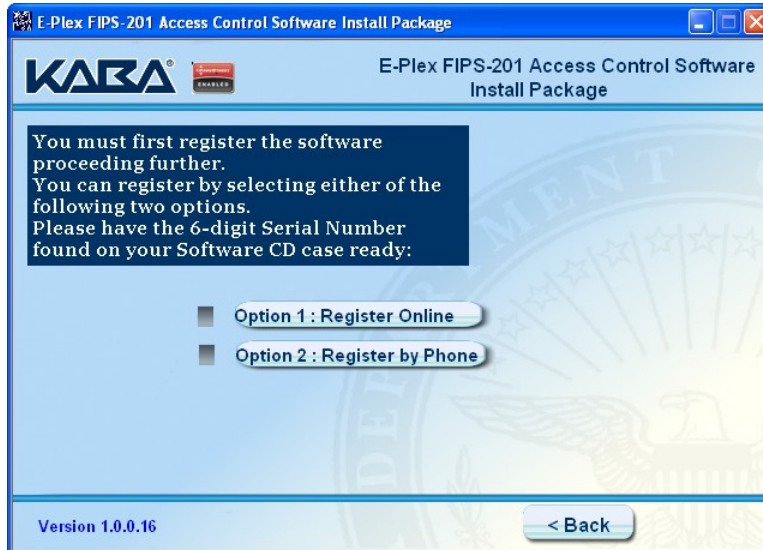
#### For FIPS-HIGH ASSURANCE Software – Custom Install option only:

- You will perform the *Custom Install* where all the Server and Client related modules, the M-Unit modules and CoreStreet's Path Builder modules will be installed in a *networked*

*environment*. User interaction will be required as per displayed prompts during the install process.



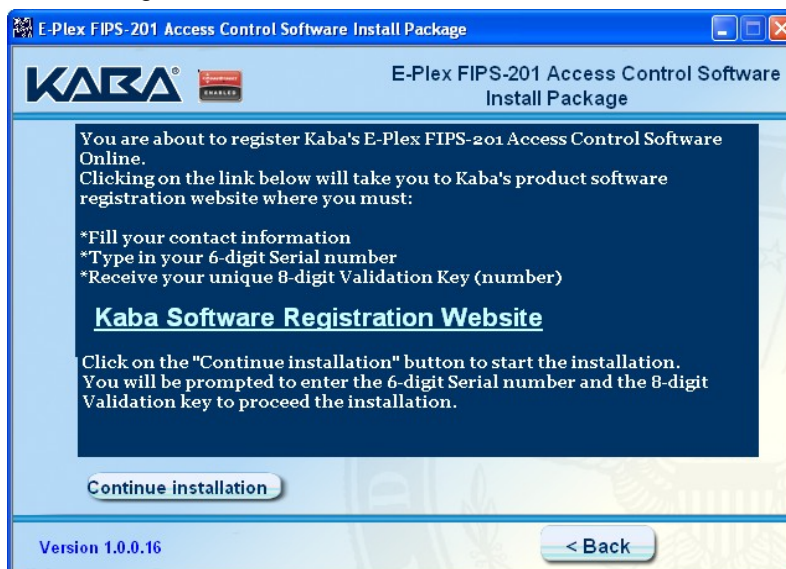
- Under **View**, Click **Software Installation Order**, and read the brief instructions and tips on the proper sequence of steps that you must follow when installing the E-Plex FIPS-201 software. Note: The software registration process occurs when you install the “Server Software”.
- Close this screen and start the installation process starting with installing the “Software Prerequisites Components”. After that when you click **Server Software** to install, the system displays the following screen, which prompts you to choose an option to register your software – through Kaba Access Control’s dedicated website or by calling Kaba Access Control’s Technical Support phone line, as shown below:



If you click **Option 1: Register Online**, proceed to the next step. If you click **Option 2: Register by Phone**, proceed to step 16.

### Option 1: Registering Through Kaba Access Control’s Website

- This action assumes that your PC can connect to the Internet. When you select this option, the system displays the following screen directing you to Kaba Access Control’s software registration website:



- Click the **Kaba Software Registration Website** link. The system opens your default Web browser to the **E-Plex FIPS-201 Software Registration** page.



If you are registering for the first time, proceed to step 7.

If you lost your registration/activation key, and need to retrieve it from Kaba Access Control, proceed to step 13.

### **Registering for the First Time:**



- If you are registering your software for the first time, select the first (Green) option. The system displays the **E-Plex FIPS-201 Software Registration** page.

### E-Plex FIPS-201 Software Registration

Thank you for purchasing our product. To activate your lock, please fill out this form to receive your registration key.

Please note that any information you submit to us will be kept strictly confidential and will not be shared with any other company.

\* required fields

CONTACT INFORMATION

Wednesday, January 07, 2009

<p><b>First Name*</b> Rita</p> <p><b>Company/Organization:*</b> University of the North</p> <p><b>Address:*</b> 123 Main Street</p> <p><b>City:*</b> Saginaw</p> <p><b>Zip/Postal Code:</b> 48601</p> <p><b>Phone Number:*</b> 989-555-1234</p> <p><b>Email address:*</b> rita@un-test.edu</p> <p><b>Purchased from which dealer?</b> Saginaw Locks</p>	<p><b>Last Name:*</b> Thomas</p> <p><b>Title/Position:</b> Facilities Manager</p> <p><b>State/Province:*</b> Michigan</p> <p><b>Country:*</b> USA</p> <p><b>Fax Number:</b> 989-555-5678</p> <p><b>Email address again to confirm:*</b> rita@un-test.edu</p> <p><b>Date registered: (mm/dd/yyyy)*</b> select 01/07/2009</p>
---	---

- Complete the fields of the **Contact Information** area. Fields followed by an asterisk (\*) are required.
- Complete the fields of the **Software Registration** area. Your Serial Number, Software Type and the Number of Seats info are located on the sticker on your software CD jewel case.

SOFTWARE REGISTRATION

<p><b>Lock model:</b> <input checked="" type="radio"/> E-Plex 5800</p>	<p><b>Software version:</b> <input checked="" type="radio"/> E-Plex FIPS-201</p>
--	--

Please enter your exact Site License No. as printed on your CD/jewel case:  
[Site License No. = Serial Number - Type - Seats]

<p><b>Serial Number:*</b> (6 Digits) 135462</p>	<p><b>Type:*</b> 1 (Full Featured)</p>	<p><b>Seats:*</b> 005</p>
---	--	-------------------------------

- Complete the fields of the **Site Information** area if you choose to provide additional information to Kaba Access Control. A sample of some of the fields is shown below.

SITE INFORMATION

**How did you first hear about this Kaba product?**

Advertisement  
 Web Search  
 Kaba Sales Representative  
 Security Consultant  
 Access Control Dealer  
 Door Company/Distributor  
 Locksmith Wholesaler  
 Locksmith  
 Other / specify:

---

**What type of installation will be utilizing the software?  
(check all that apply)**

Commercial Building  
 College / University  
 School / Educational  
 Airport / Port Authority  
 Industrial / Manufacturing  
 Government / Military  
 Hospital / Healthcare  
 Other / specify:

---

**Note:** Information submitted is kept private and used only by Kaba Access Control for informational purposes.

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- When you have completed the registration, click **Submit**.

▶ SUBMIT
▶ CLEAR

Click on "SUBMIT" only once and wait. It may take up to 30 seconds for the system to process and validate your request.

Copyright ©2009 Kaba Ilco Corp.

The system will automatically generate your unique 8-digit **Registration/Activation Key** based on your input:

Your Registration Key: 37200992

Please write down your registration key number and close this page. Follow the software install screen prompts to finalize your installation.

- Proceed to step 15.

### Lost Registration/Activation Key:

- If you lost your registration key, select the second (Red) option. The system displays the **Registration/Activation Key Retrieval** screen.



#### E-Plex FIPS-201 Software Registration Registration / Activation Key Retrieval

If you lost your registration / activation key, the system can send it to the original email account that was used to register your product.

If you do not remember the email address you used when you registered your product, please call Kaba's technical support phone line at 1-800-849-8324 or 1-336-725-1331 between 8:00am and 5:00pm, monday through friday (except holidays), Eastern Standard Time.

Email Address:

SEND REGISTRATION KEY

- Type your **Email Address** in the field and click **Send Registration/Activation Key**. You will receive an e-mail from Kaba Access Control with your Registration Key.

From:	eplex@kaa.kaba.com
To:	rita@un-test.edu
Date:	07/01/2009 02:25 PM
Subject:	E-Plex FIPS-201 Registration / Activation Key Retrieval

E-Plex FIPS-201 Software Registration  
Registration / Activation Key Retrieval - CONFIDENTIAL

This is an automated message. Do not reply.

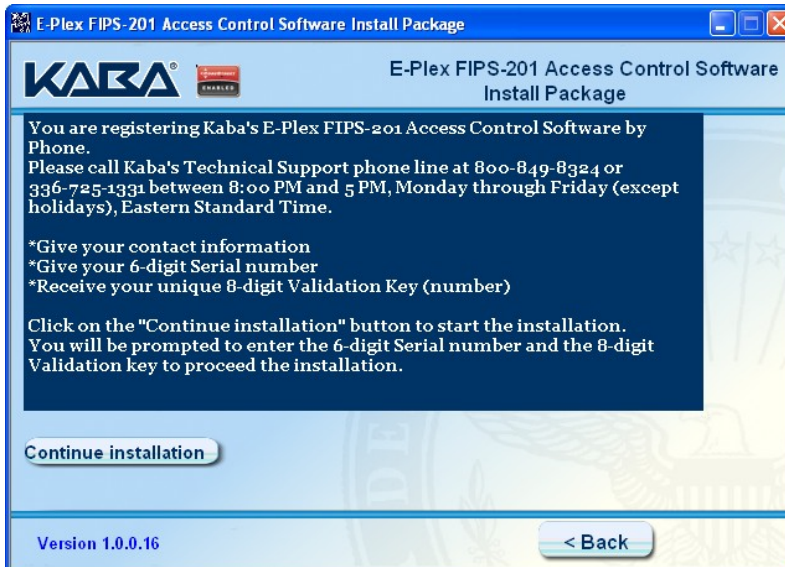
Your Registration / Activation Key: 37200992

- Write your Registration key down and close the window. This number will be used to activate your software. On the **Install E-Plex FIPS-201 Access Control Software** screen, click **Continue Installation** to complete the software registration process. You will be asked to enter your Serial number again along with the Registration / Activation key you received to complete the installation. Proceed to **Continue with Registration** in this chapter.



## Option 2: Registering by Phoning Kaba Access Control's Technical Support

- When you click this option, the system displays the following screen:



Follow the instructions on the screen to register by calling Kaba Access Control's Technical Support line.

- Kaba Access Control's Technical Support personnel will first register your contact info, Serial Number, Type of Software info and the Number of Seats info for your software (from your software CD jewel case sticker), and will then give you a unique 8-digit **Registration/Activation Key** for your software over the phone.
- Write your Registration key down and click **Continue Installation** to complete the software registration process.  
You will be asked to enter your Serial number again along with your Registration/Activation key you just received to complete the registration and activation of the software. Proceed to **Continue with Registration** below.

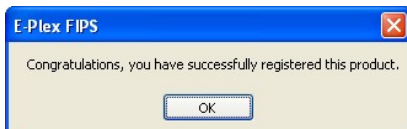
### Continue with Registration

Complete the following steps to finish registering the E-Plex FIPS-201 Software.

- Click Continue Installation on the Install E-Plex FIPS-201 Access Control Software screen.
- The system displays the **Enter Registration Information** screen.



- Complete the **Enter Serial number** and **Enter Registration key** fields.
- Click **OK**. The system congratulates you for successful registration with Kaba.

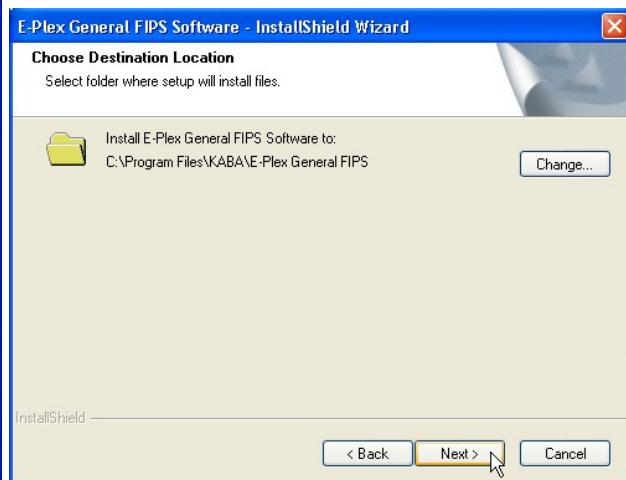
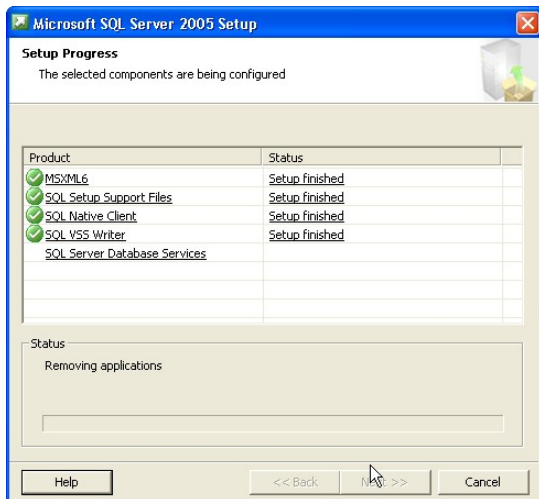
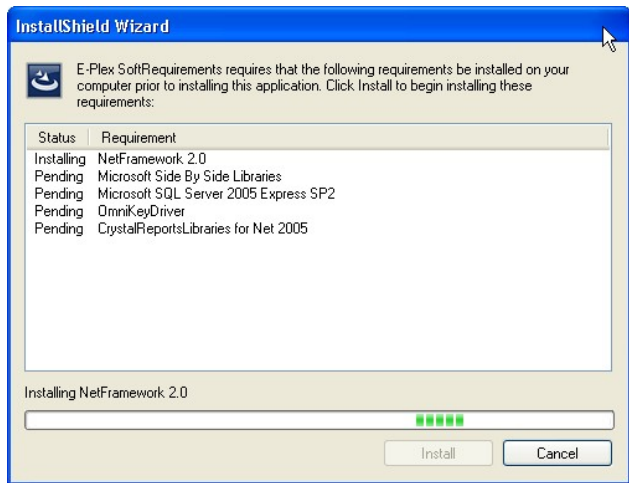
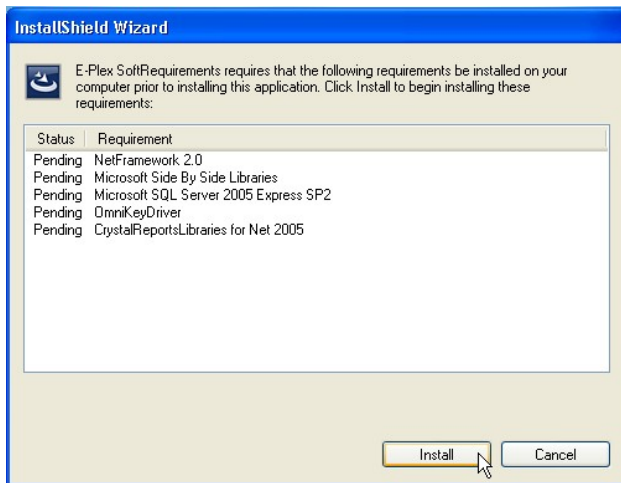
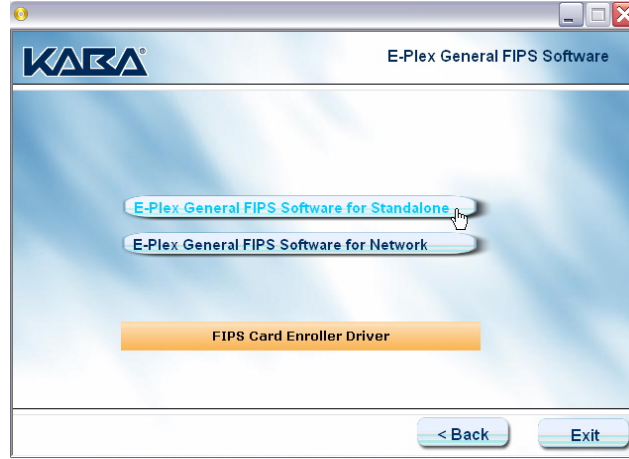


- Click **OK** and proceed to the final part of the installation of the E-Plex FIPS-201 software “Client Software & M-Unit PDA” as described in the following section, “*Software Installation*”.

# Install Option-1: Standalone/Express Installation

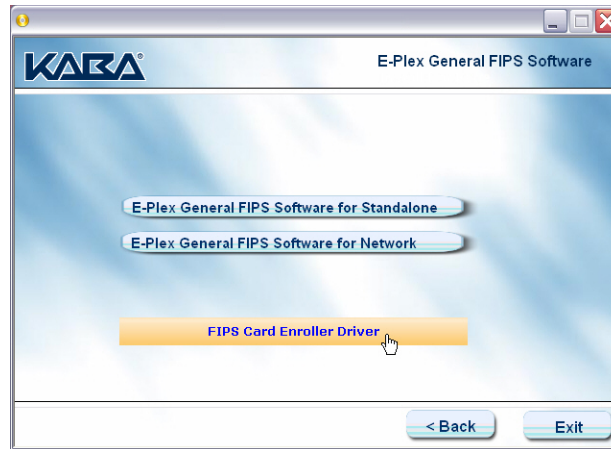
## FIPS-General: Express Install on Stand-alone PC:

If you are installing the E-Plex **FIPS-General** version of the software on a single Standalone PC, please choose “Standalone Express Install” option. The software will get installed with minimal user interaction. The following are a few sample Express install screen shots.



## Smartcard Driver Installation

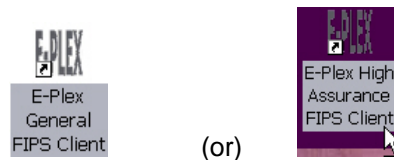
The Smartcard enroller currently used is an **SCM Microsystem's SDI010** model. After installing the main applications software by Express install, click on "*FIPS Card Enroller Driver*" to install the smart card enroller driver software; ensure that the Smartcard enroller is connected to your PC via a USB port.



- When the installation is complete, the system displays the **InstallShield Wizard Complete** window. Click **Finish** when all installation is completed.



- The Standalone/Express install of the software is completed now including the installation of the smartcard enroller driver.
- **Important:** You must restart the PC after which you should be ready to launch and use the E-Plex FIPS-201 software by clicking the ***E-Plex FIPS General (or, FIPS High Assurance) Client icon*** from your PC desktop.



- Now please go back to Chapter, "**2. Getting Started**" and resume from the Section, "**Starting the E-Plex FIPS-201 Server and Client Software on the PC.**"

# Install Option-2: Custom/Network Installation

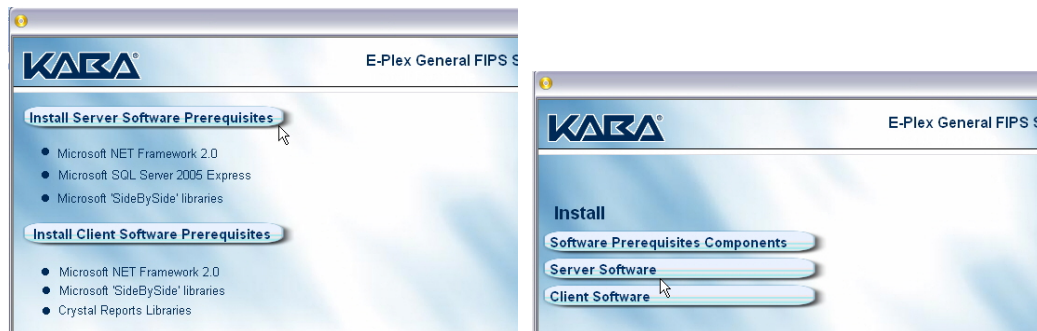
## FIPS-HIGH ASSURANCE or FIPS-General: Custom Install (Networking):

For the FIPS-HIGH ASSURANCE version of the software install, there is no Express Install option since networking is mandatory here. For this install environment, please follow the detailed procedure as shown in the following few pages.

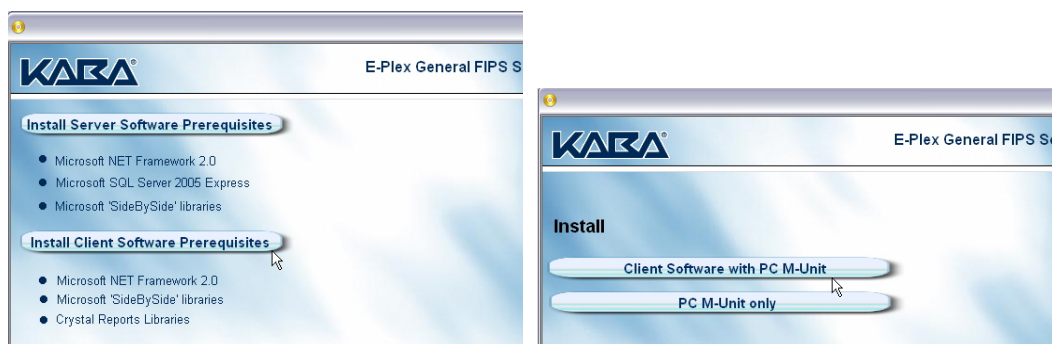
The E-Plex FIPS-201 software mainly consists of **Server** related and **Client** related modules including their Pre-requisite software modules and the M-Unit related modules. Additionally, for the *FIPS-HIGH ASSURANCE* software version only, you will also be required to install *CoreStreet's Path Validation* component modules:



**Server Software Installation** – You must install all Server related software on your separate Server PC starting with Server Prerequisites. If on the other hand you will be using one standalone PC, then you will install all Server and Client modules on this PC, starting with installing all the Server related software prerequisites first (by clicking on *Software Prerequisites Components* ). Complete the steps in the following order:



- **Server Software Prerequisites**
- **Server Software**
- **Client Software with PC M-Unit software Installation** – You must install all Client related software on your different Client PC(s), unless you will be using one standalone PC in which case you will install all Server and Client related modules on this PC, starting with installing all Client related prerequisites modules first. The Client install process will also automatically install the PC M-Unit related module on the same PC. Complete the steps in the following order:



- **Client Software Prerequisites**
- **Client Software with PC M-Unit**
- **PC M-Unit only** – If you want to install the PC M-Unit software only on multiple, separate portable units, you just need to install only the M-Unit software by selecting this option. Complete the steps in **Client Software and M-Unit PDA** by selecting and installing the PC M-Unit program only.

Complete the following steps to install the E-Plex FIPS-201 software which consists of the Prerequisite modules, Server modules and Client & PC M-Unit modules:

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**Note:** Ensure that the Smartcard enroller is connected to the (Client) PC through the USB port.

---

Insert the E-Plex FIPS-201 software installation CD into the appropriate drive of the PC.

The E-Plex FIPS-201 Software Installation Browser loads and displays the **E-Plex FIPS-201 Access Control Software Install Package** browser menu.



From this window, you can view and install the following:

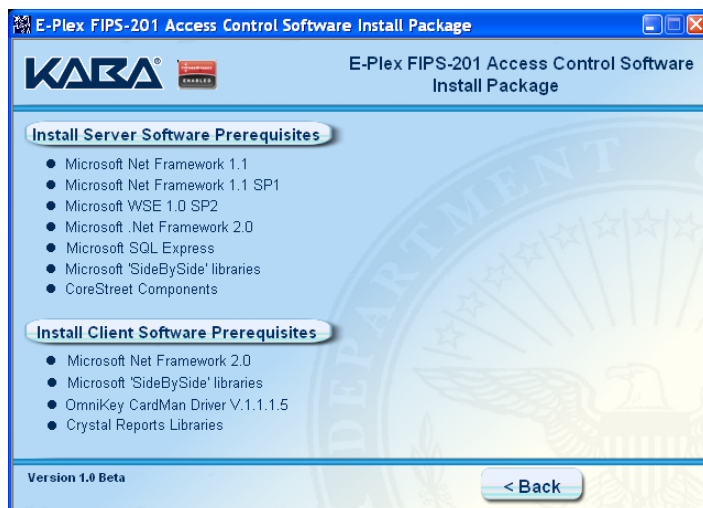
- View
  - System Requirements
  - Software User Guide (this manual)
  - Software Installation Order
  - CoreStreet Validation Extension Settings (only in HIGH ASSURANCE software CD)
- Install
  - Software Prerequisites Components
  - Server Software
  - Client Software and M-Unit PDA



## Prerequisites

When you are ready to install the Software Prerequisites, click **Software Prerequisites Components**. The system displays the list of prerequisites applications, including the following:

- Server Software Prerequisites
- Client Software Prerequisites



### Server Software Prerequisites

You will be installing the following Server Software Prerequisites from the installation CD:

Prerequisite	Used By
Microsoft Net Framework 1.1	CoreStreet
Microsoft Net Framework 1.1 SP1	CoreStreet
Microsoft WSE	CoreStreet
Microsoft Net Framework 2.0	CoreStreet and Kaba
Microsoft SQL Express	CoreStreet and Kaba
Microsoft Side by Side Libraries	CoreStreet and Kaba
CoreStreet Components	

Click **Install Server Software Prerequisites**. The system checks for existing components and then installs each component, one after another. If a particular software prerequisite is already installed on the computer, the system does not reinstall it.

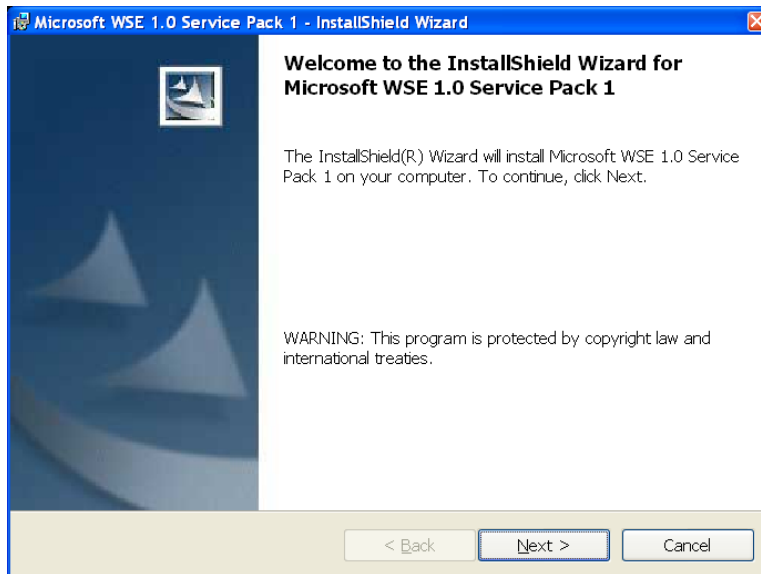
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**Note:** If your OS is Vista Home Premium or higher or if it is Server 2003 or higher, the Microsoft .NET Framework 1.1, Microsoft .NET Framework 1.1 SP1, and Microsoft .NET Framework 2.0 are already installed on your machine because they are part of these Windows OS packages.

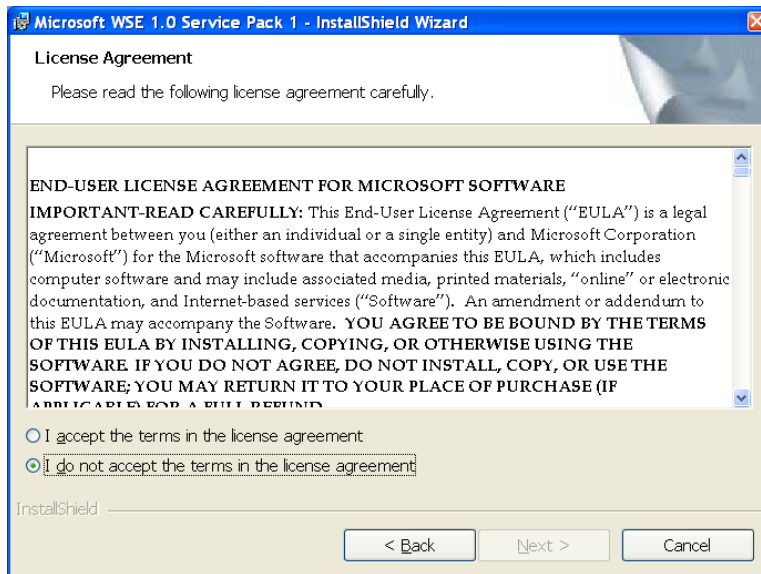
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## **Microsoft WSE 1.0 Service Pack 1**

- The system displays the **InstallShield Wizard for Microsoft WSE 1.0 Service Pack 1**.

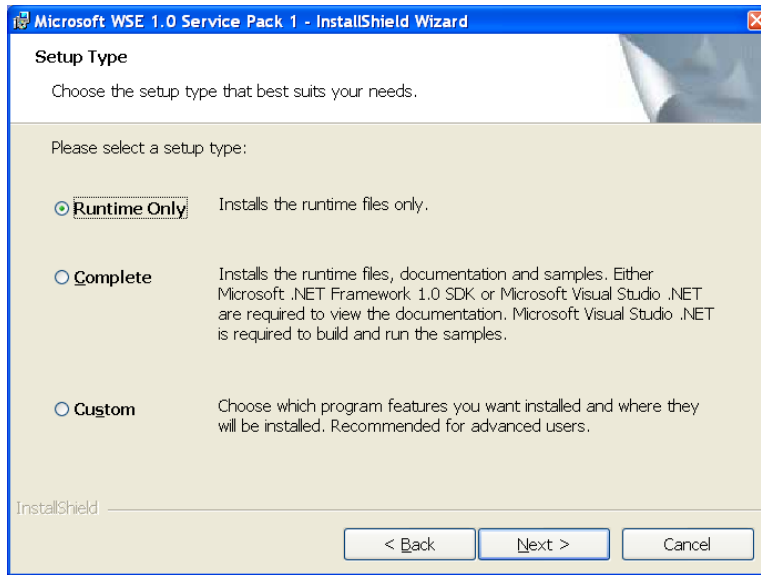


Click **Next**. The system displays the **License Agreement**.

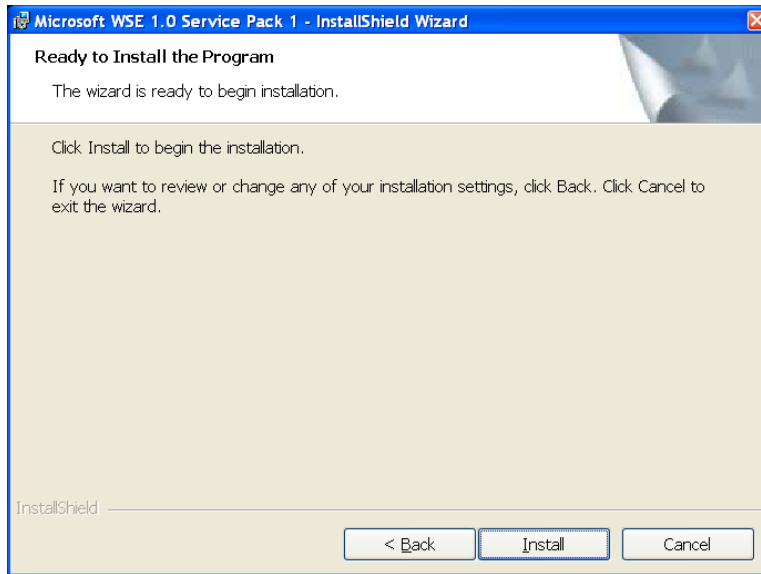




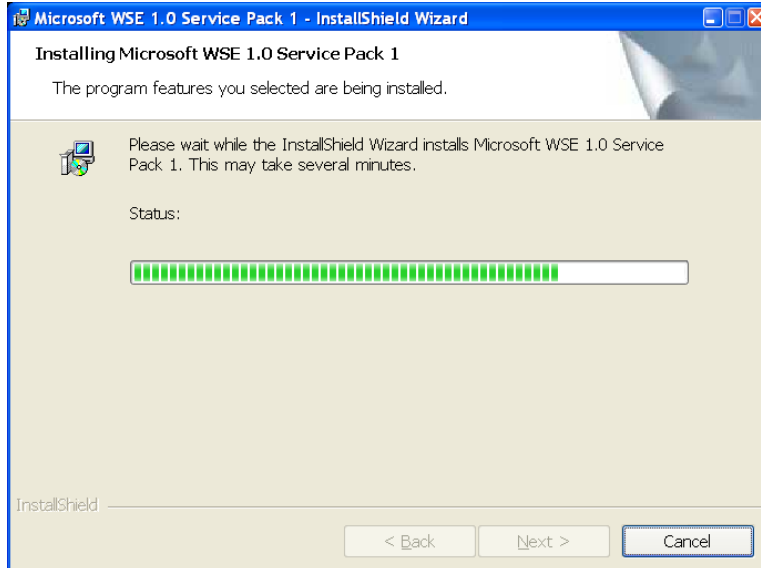
Select **I accept the terms in the license agreement**, and then click **Next**. The system displays **Setup Type**.



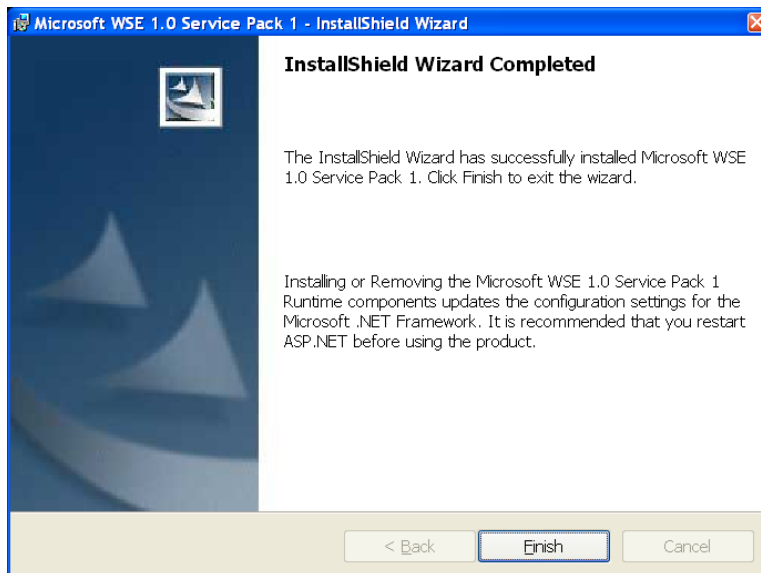
Select **Runtime Only** and then click **Next**. The system indicates that it is ready to install the application.



Click **Install** to install the program.

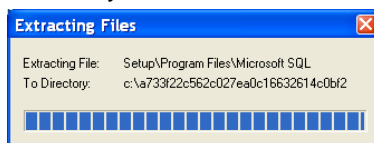


Once the installation is complete, select **Finish** to exit the InstallShield Wizard and return to the previous window.

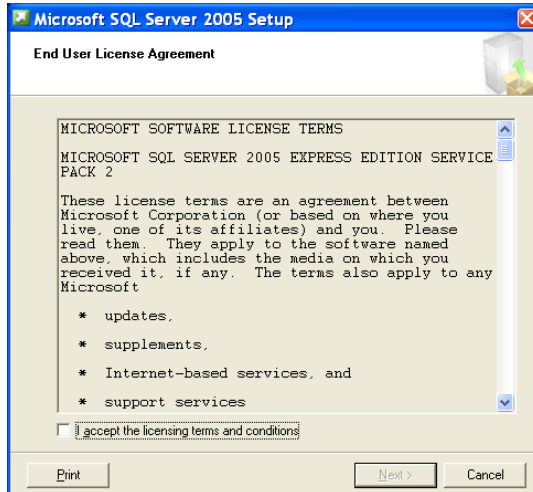


### **Microsoft SQL Express**

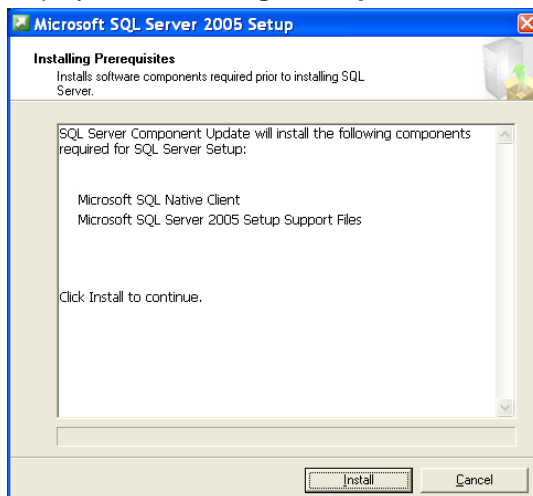
MS .NET Framework (1.1 and 2.0) setup will be done here and the files will be extracted to their directory.



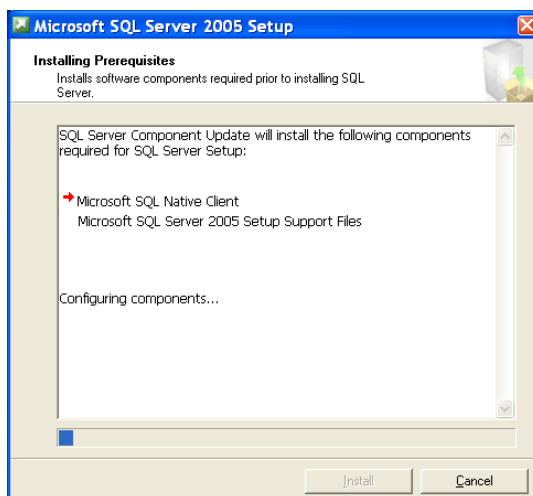
- The system displays the **Microsoft SQL Server 2005 Setup**.



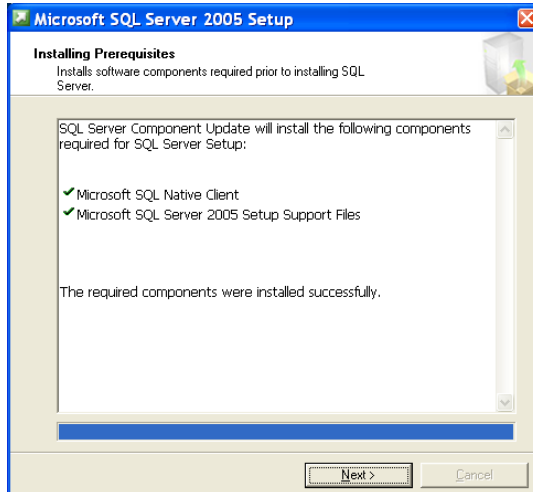
- Select **I accept the licensing terms and conditions** and click **Next**. The system displays the **Installing Prerequisites**.



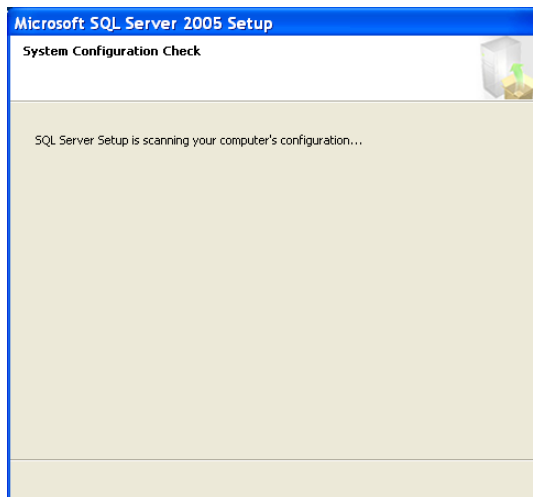
- Click **Install**. As the software installs, the system displays a status bar at the bottom of the window.



- The system displays a confirmation when installation is complete.



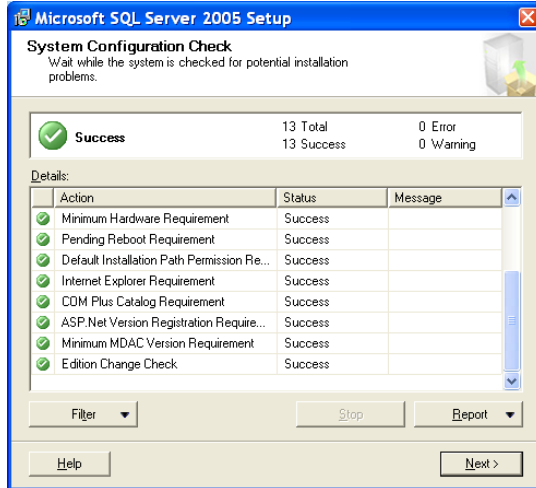
- Click **Next**. The system performs a **System Configuration Check**.



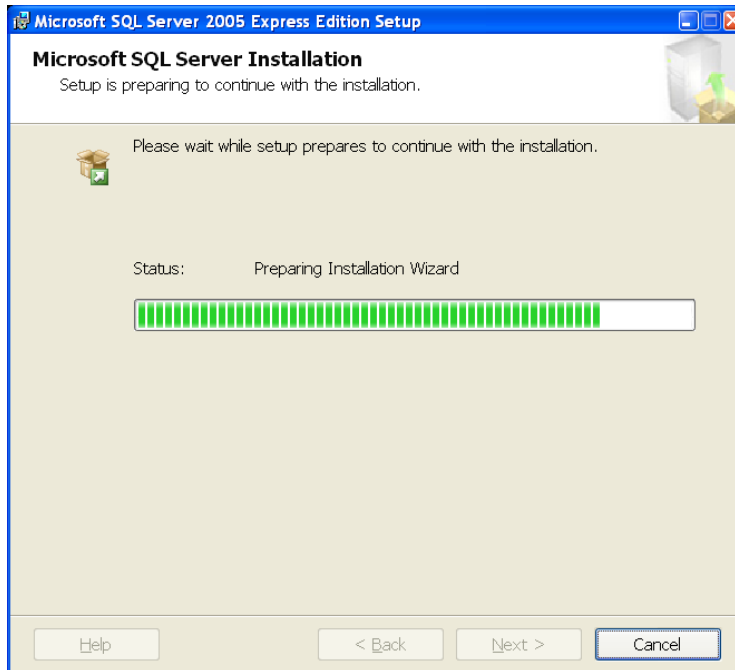
- The system displays the **Microsoft SQL Server Installation Wizard**.



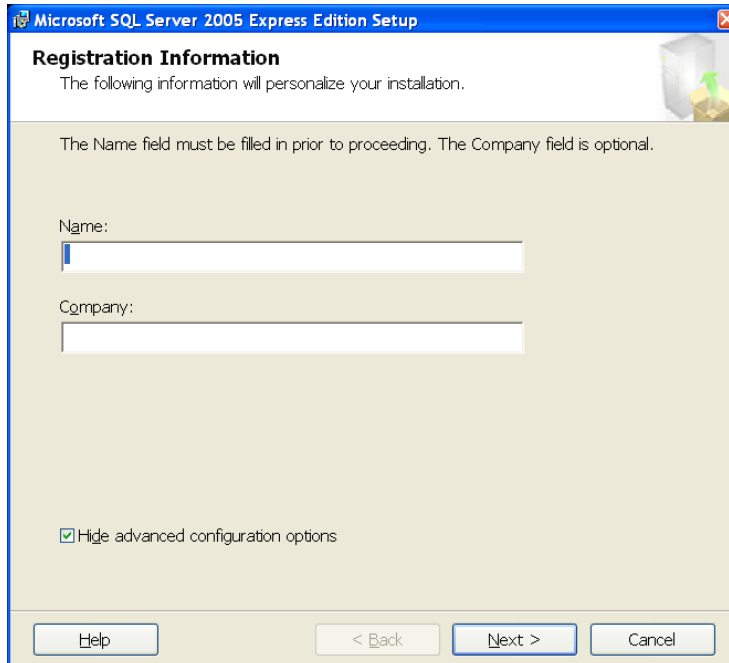
- Click **Next**. The system displays the **System Configuration Check** window.



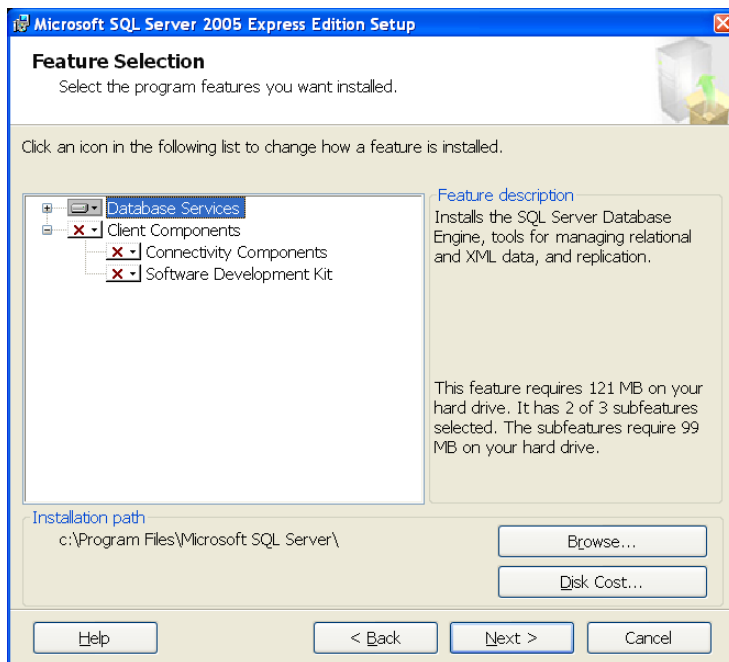
- Click **Next**. The system displays a status bar for preparing the installation.



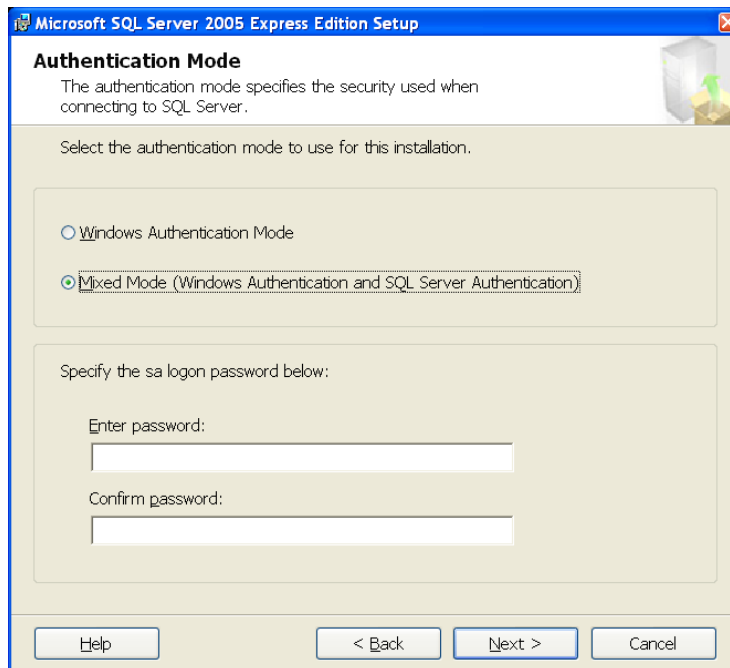
- Click **Next**. The system displays the **Registration Information** window.



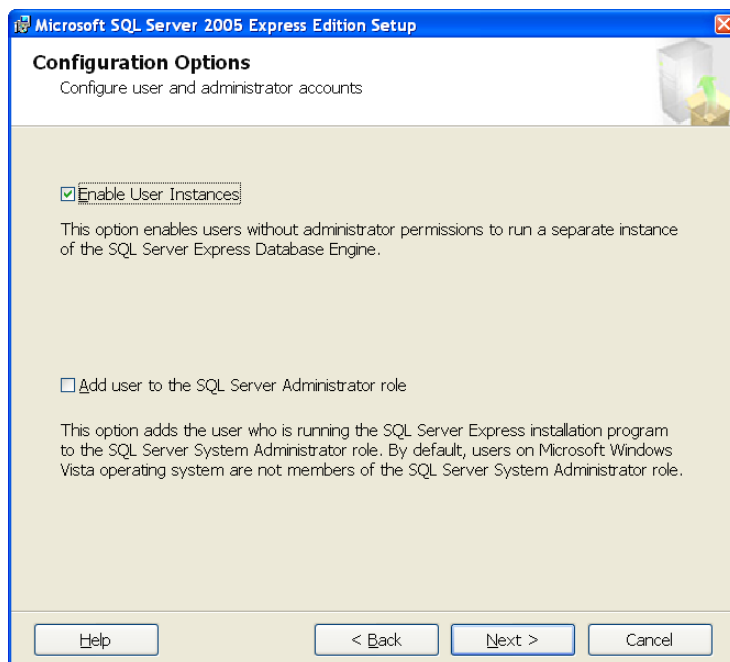
- In the **Name** field, type your name. The **Company** field which is optional, type your Company's name. Click **Next**. The system displays the **Feature Selection** window.



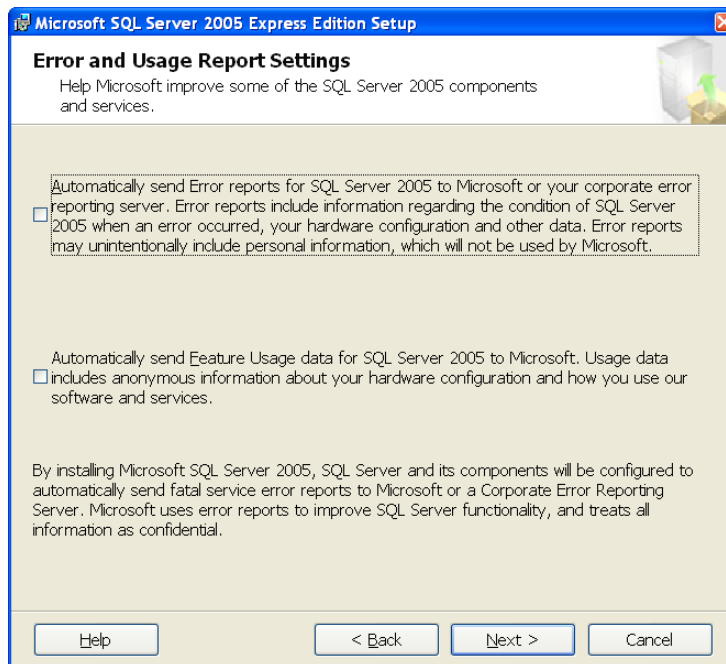
- Keep the default settings on the screen. Click **Next**. The system displays the **Authentication Mode** window.



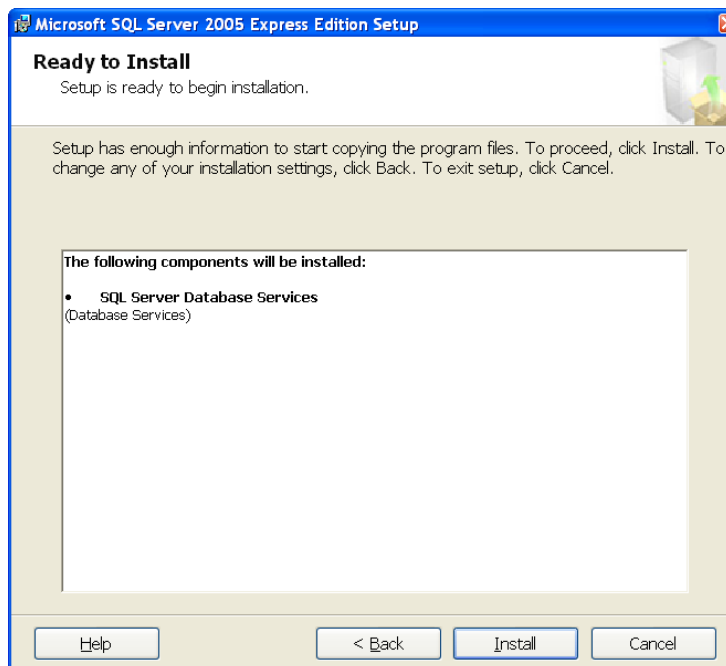
- **Important:** You must select the **Mixed Mode**. Enter a password (this is for the **sa logon** which you will encounter when configuring the SQL database server when installing the Server software later) and confirm the password entry by typing it in the next field
- Write down this sa logon password since you must type this same password later on when you configure the SQL database server login info under the “**Server Software**” section, on page 6-36. Click **Next**. The system displays the **Configuration Options** window.



- Select **Enable User Instances** and click **Next**. The system displays the **Error and Usage Report Settings** window.

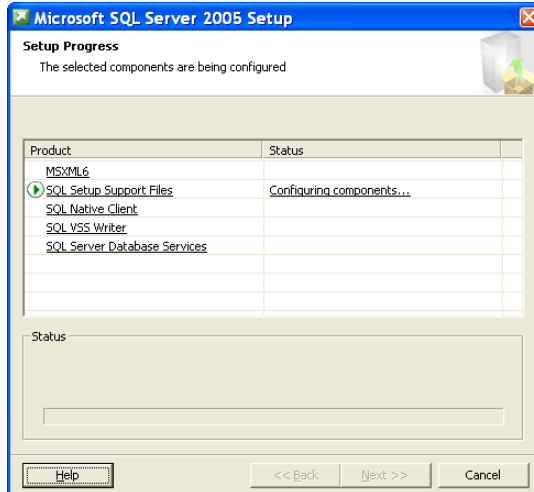


- Leave both items above unchecked. Click **Next**. The system displays the **Ready to Install** window.

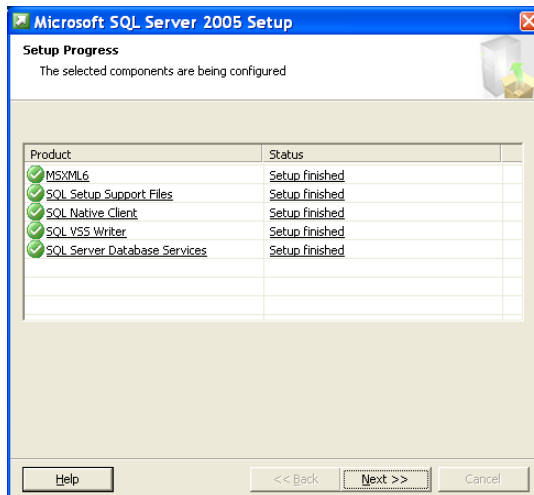




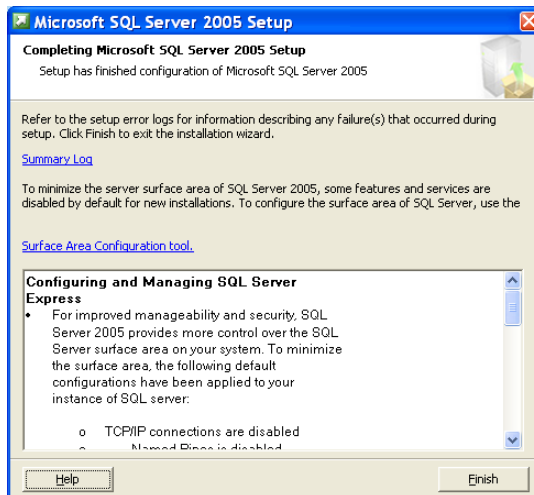
- Click **Install**. The system begins the installation.



- When the installation is complete, the system provides a confirmation window.



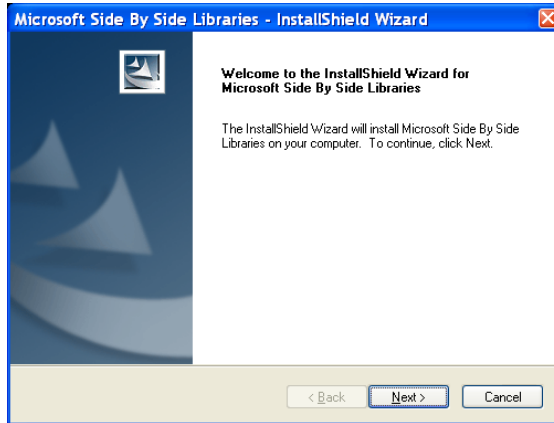
- Click **Next**. The system displays a window verifying that setup is complete.



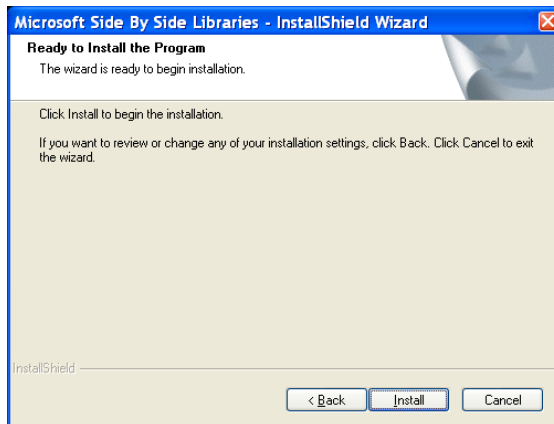
- Click **Finish**.

### **Microsoft Side By Side Libraries**

- The system displays the **Microsoft Side By Side Libraries InstallShield Wizard**.



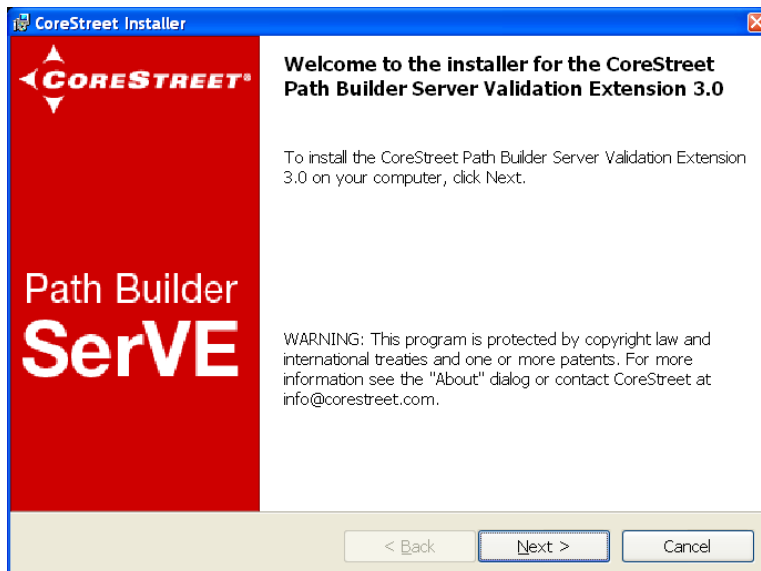
- Click **Next**. The system is ready to begin installation.



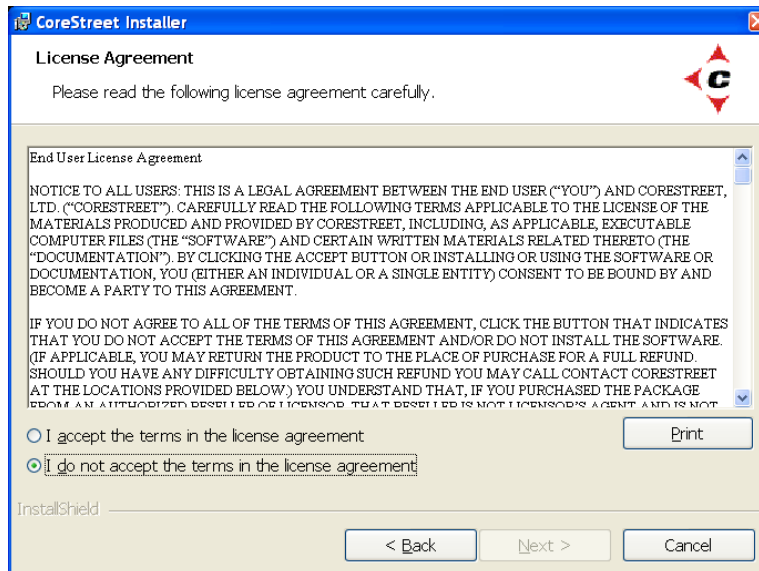
- Click **Install**. When installation is complete, click **Finish**.

### **CoreStreet Components (Path Builder SerVE) – (applicable to FIPS-HIGH ASSURANCE only)**

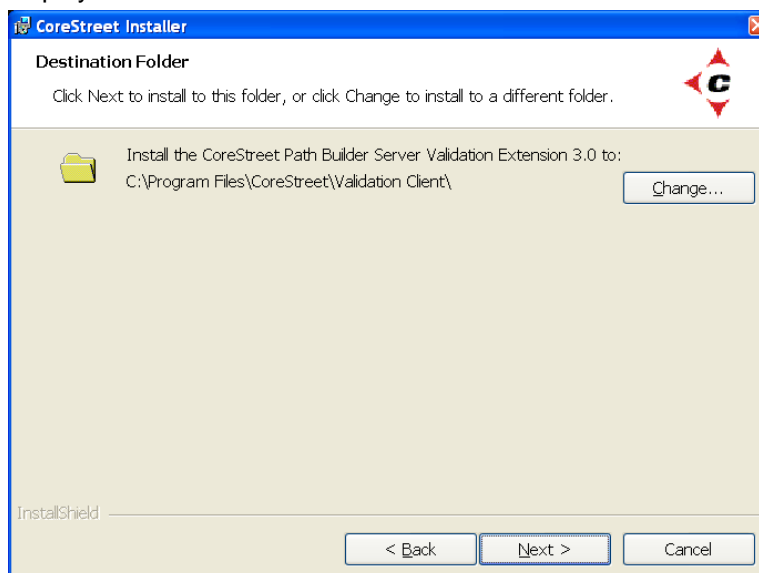
- The system displays the **CoreStreet Installer** welcome window.



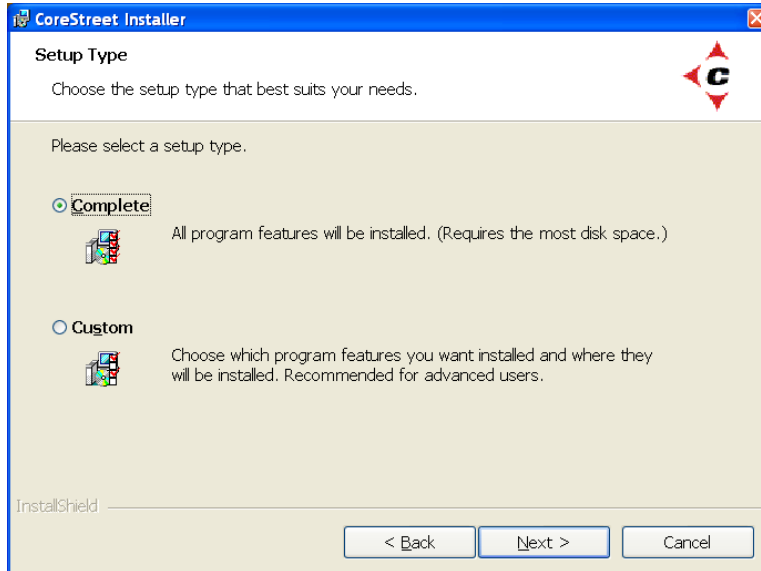
- Click **Next**. The system displays the **License Agreement**.



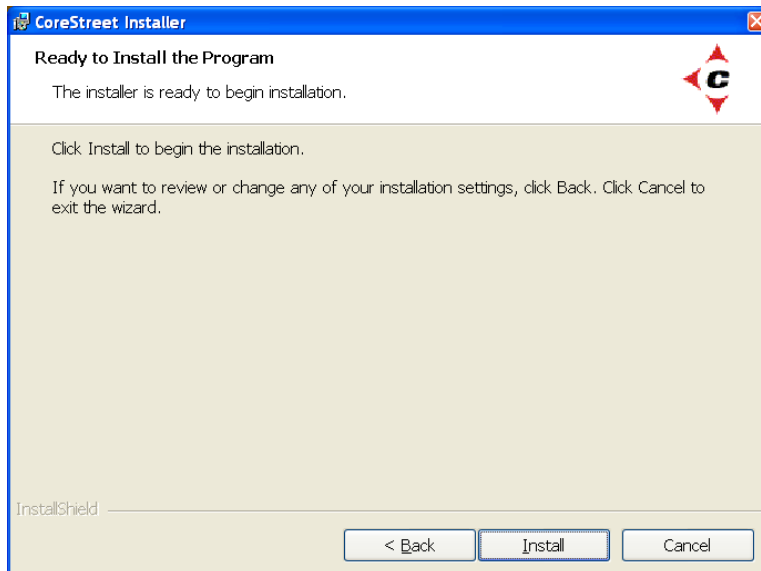
- Select **I accept the terms in the license agreement** and click **Next**. The system displays the **Destination Folder** window.



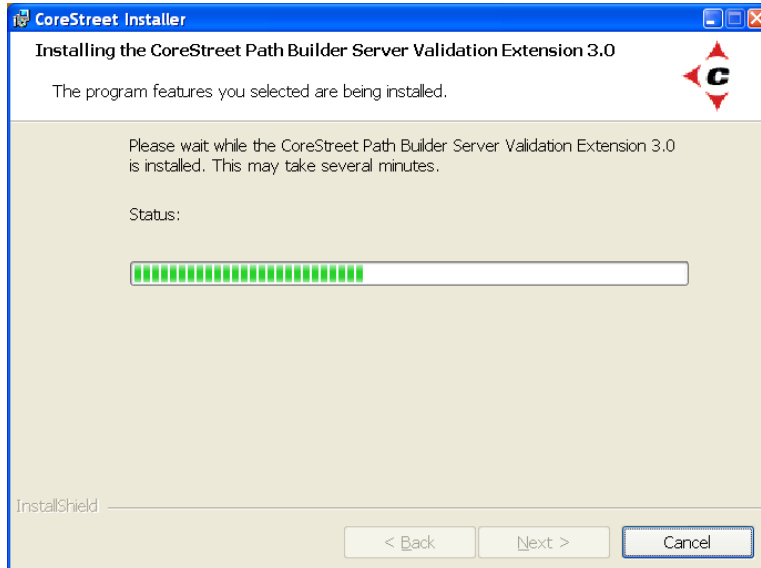
- Click **Next**. The system displays the **Setup Type** window.



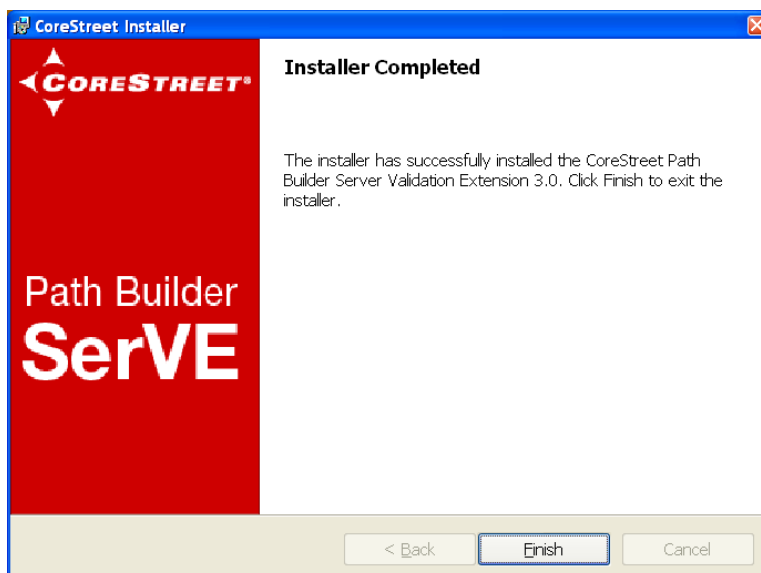
- Select **Complete** installation and click **Next**. The system is ready to begin installation.



- Click **Install**. The system displays a status bar while the program is installed.



- When installation is complete, click **Next**. The system displays the **Installer Completed** window.



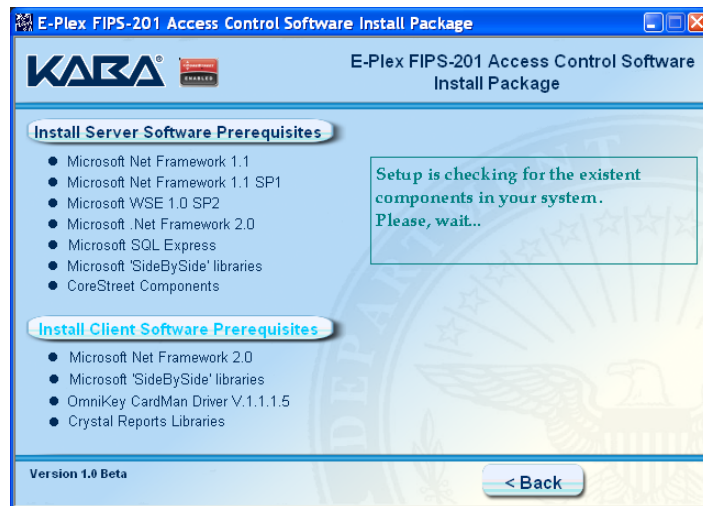
- Click **Finish** to return to the **Install Package** window.

## Client Software Prerequisites

- You must install the following Client Software Prerequisites from the installation CD:

Prerequisite	Used By
Microsoft Net Framework 2.0	
Microsoft Side by Side Libraries	
SCM SDI010 Driver	Smart Card enroller
Crystal Reports Libraries	The Reports feature

- Click **Install Client Software Prerequisites**. The system checks for existing components.



The system installs each component, one after another. If a software prerequisite is already installed on the computer, the system does not reinstall it.

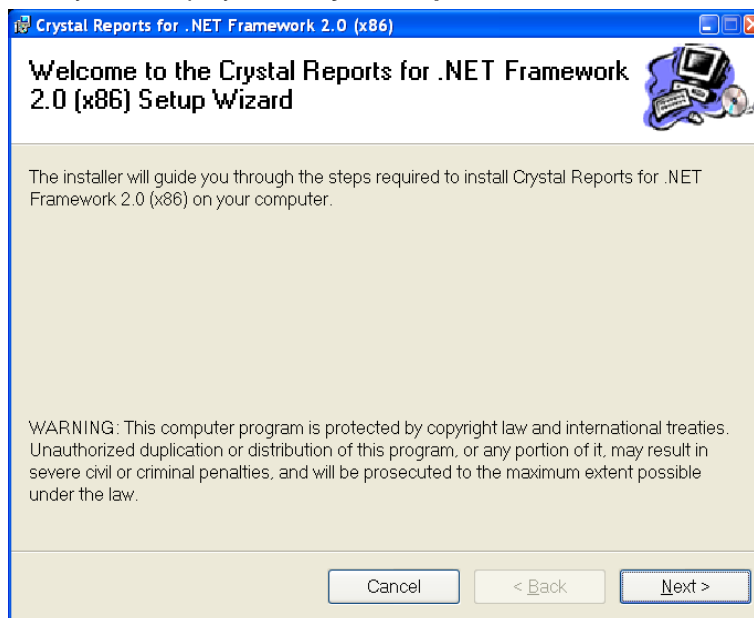
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**Note:** *If you are using the same PC as both server and client, then the Microsoft .NET Framework 2.0 and Microsoft Side By Side Libraries installations will be skipped since they were already installed during the Prerequisites for the Server software installation phase.*

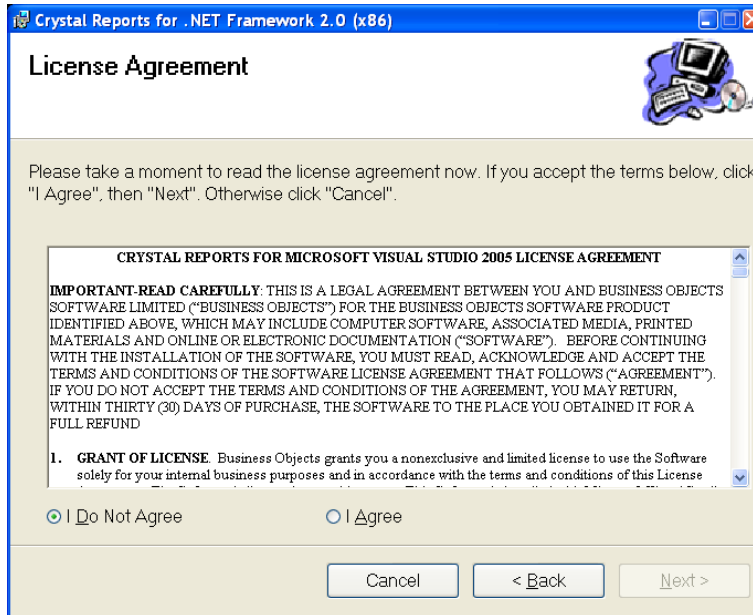
---

### **Crystal Reports for .NET**

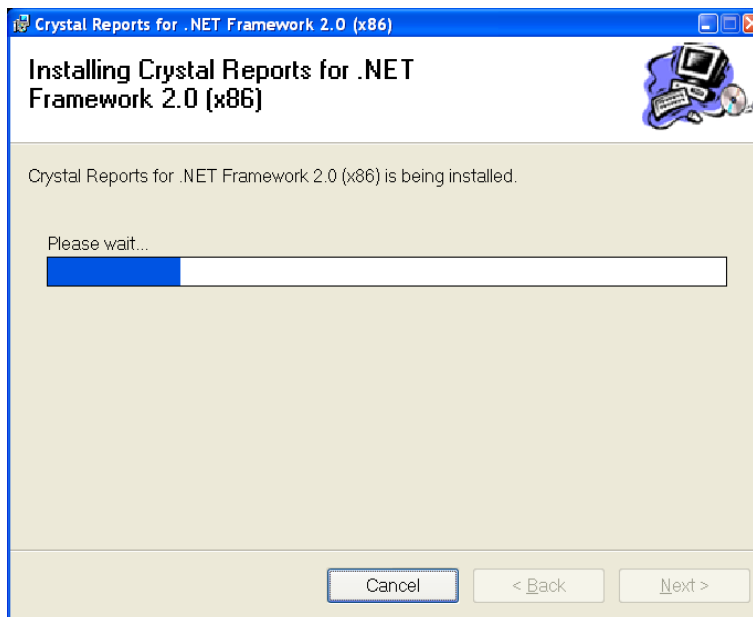
- The system displays the **Crystal Reports for .NET Framework 2.0** setup window.



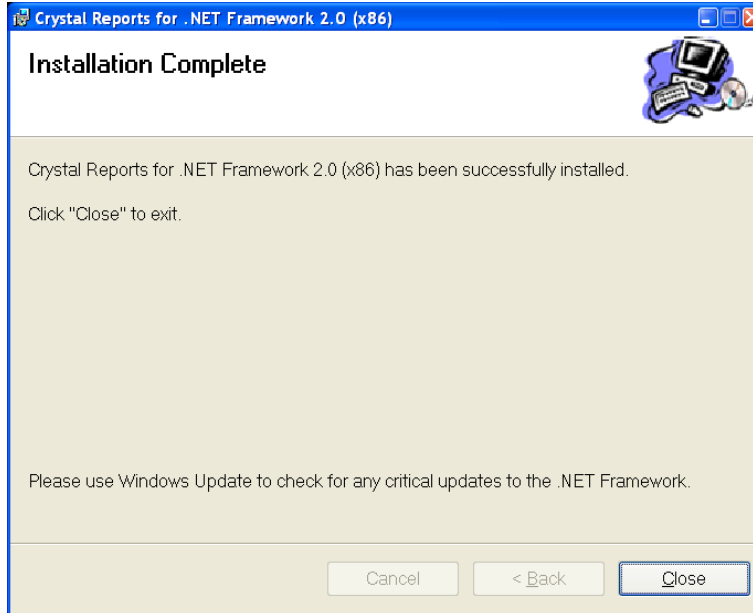
- Click **Next**. The system displays the **License Agreement** window.



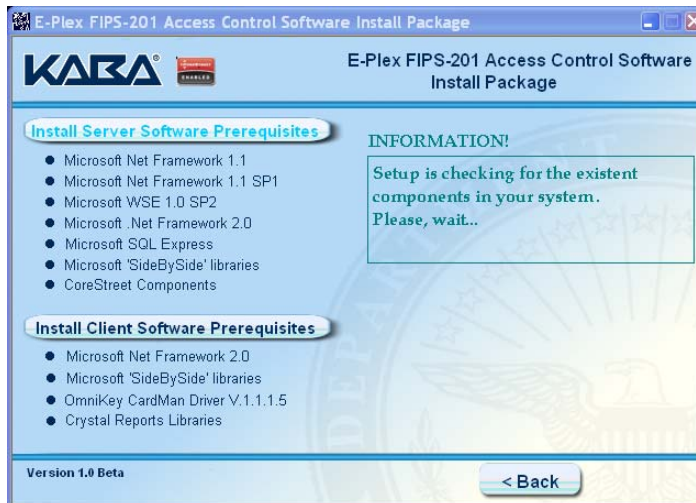
- Select **I Agree**. Click **Next**. The system displays the program installation window. The program begins installation.



- When the installation is complete, click **Close**.



- The system returns to the **E-Plex FIPS-201 Access Control Software Install Package** window.



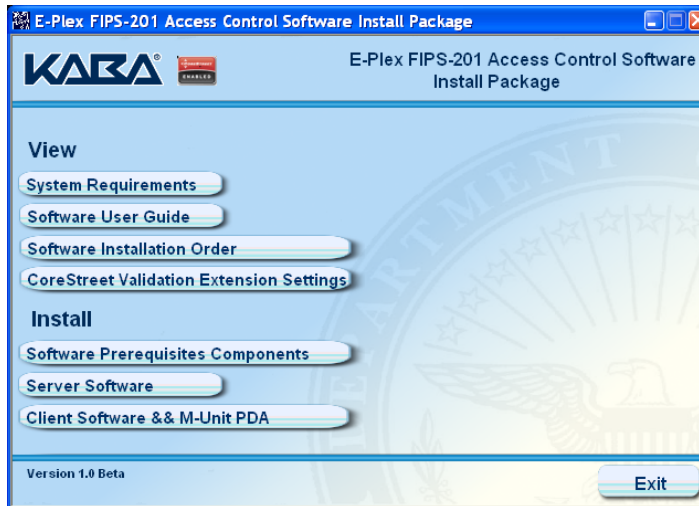
- Click **Back**.



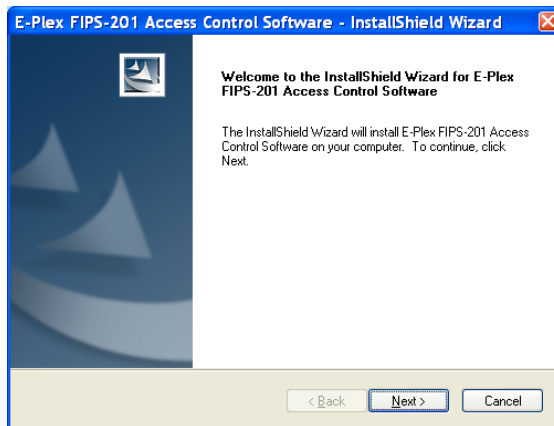
# Server Software

**Note:** The software registration process occurs during the server software installation.

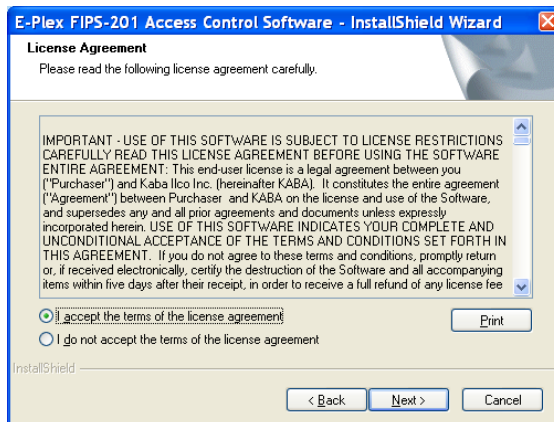
- The system displays the main **E-Plex FIPS-201 Access Control Software Install Package** browser menu.



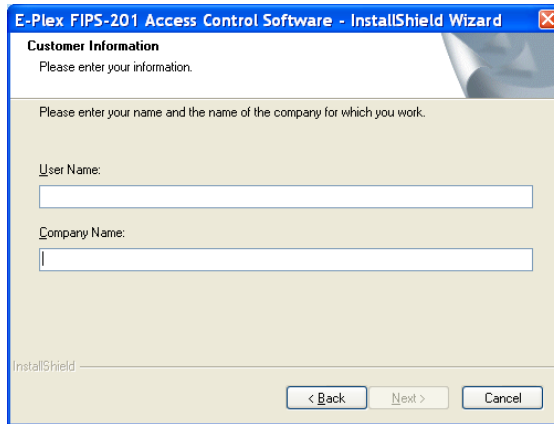
- Click **Server Software** to install. The system checks for existing components.
- The system displays the **FIPS-201 Access Control Software** installation window.



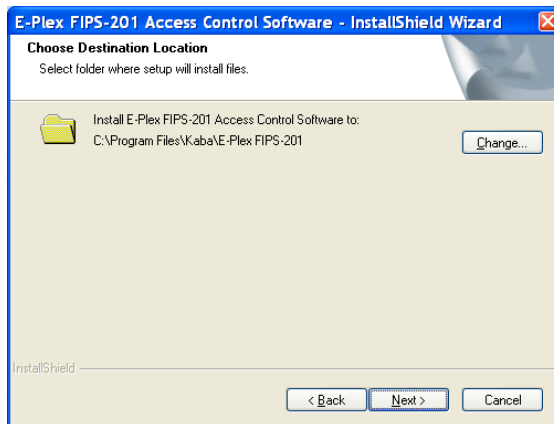
- Click **Next**. The system displays the **License Agreement** window.



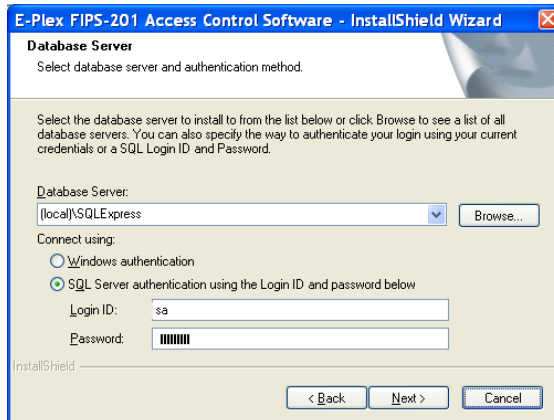
- Select **I accept the terms of the license agreement**.
- Click **Next**. The system displays the **Customer Information** window.



- Enter your **User Name** and the **Company Name** as before.
- Click **Next**. The system displays the **Choose Destination Location** window.



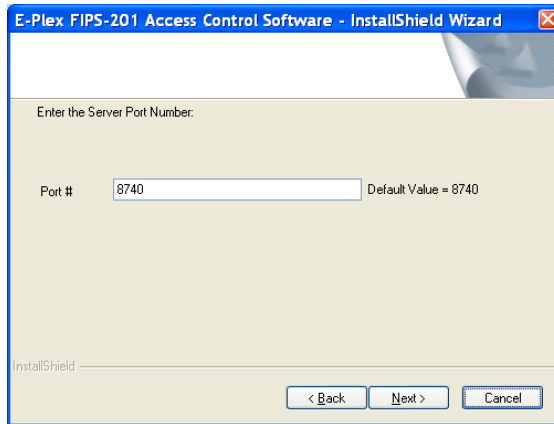
- Leave the location as the default (or choose a different one), and click **Next**. The system displays the **Database Server** window.



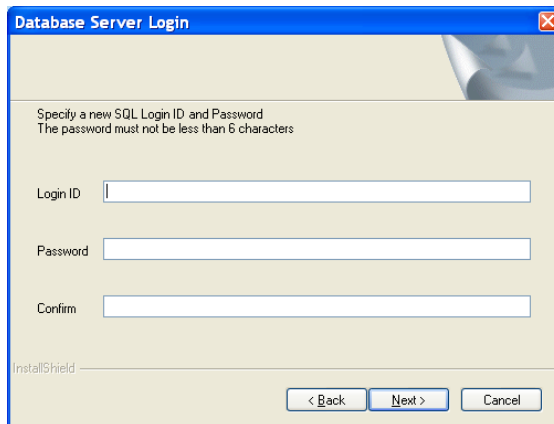
- The **Database Server** is “SQL Express” by default; if it is different in your case (eg., if it is “My Instances”), change to this name.
- For “Connect using”, select **SQL Server authentication using the Login ID and password**.

***Important:*** The **Login ID** must be “sa” and the **Password** must be the same sa logon password that you created and entered earlier under section “Microsoft SQL Express” on page 6-23. Refer to **Microsoft SQL Express** for more information.

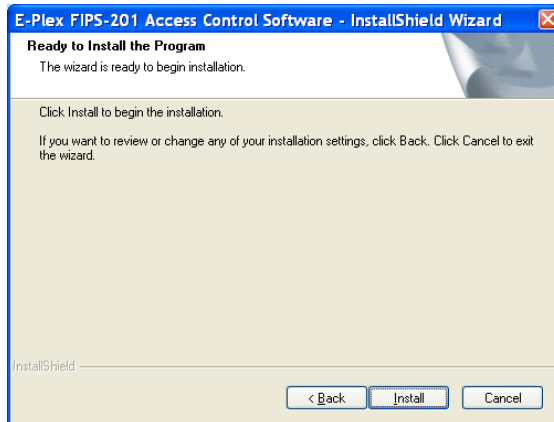
- Click **Next**. The system displays the **Server Port Number** window.



- Keep the default port number unless your Server calls for another port number (check with your IT personnel).
- Click **Next**. The system displays the **Database Server Login** window.

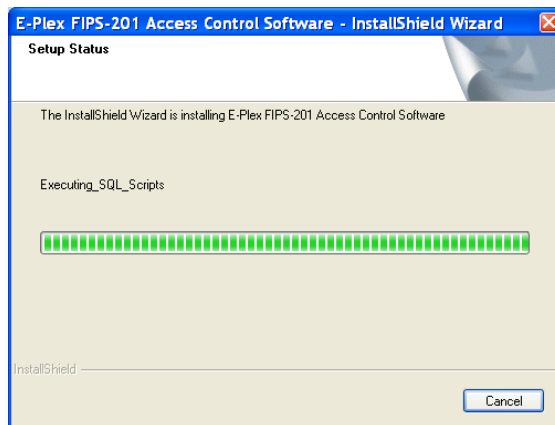


- ***Important:*** Create your new SQL Login ID (name) and Password (and Password again to confirm it) and remember them, or write them down and store them in a secure place. It is recommended that you use the *same* Login ID name and the Password combo in the E-Plex FIPS-201 software also later on so that you do not have to remember too many login and password info when you actually use the software everyday. [ Eg: Logon ID: *john* Password: *kabailco* ].
- Click **Next**. The system displays the **Ready to Install** window.

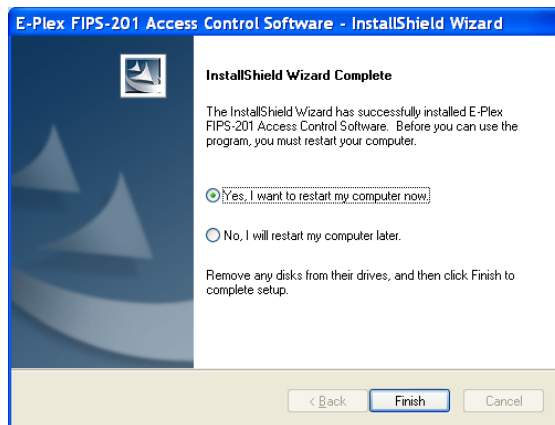


- Click **Install**.

- The system displays the **Setup Status** window as the program installs to the computer.



- When the software completes installation, the system displays the **InstallShield Wizard Complete** window.



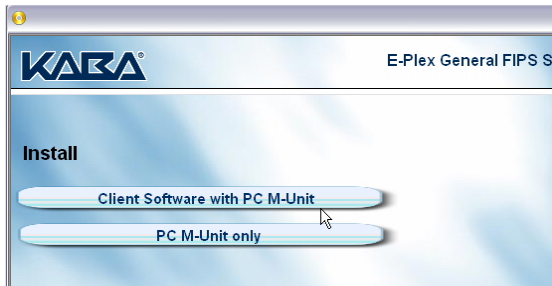
- Select **Yes, I want to restart my computer.**
- Click **Finish**. The computer will automatically shut down and restart which may take a few minutes. Eject and re-insert the E-Plex FIPS-201 software CD to view the main installation screen again.

## Client Software and PC M-Unit

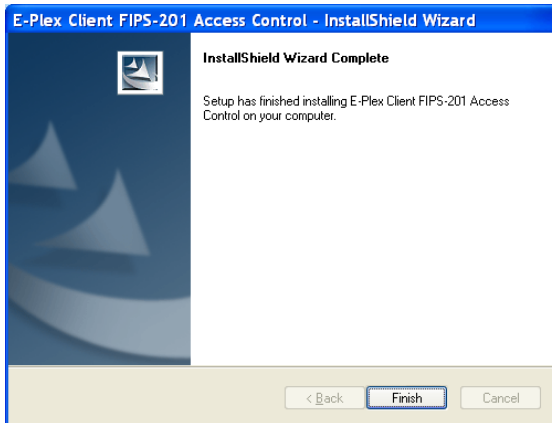
- Finally you must install the Client module which will also automatically install the PC M-Unit related module.



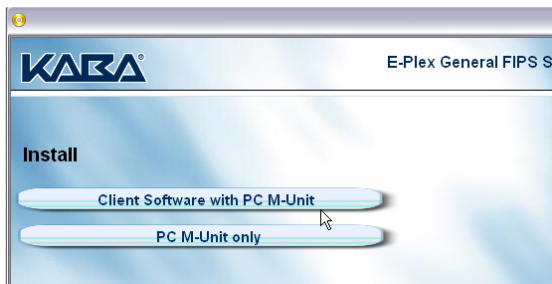
- Click **Client Software & M-Unit PDA**. The system displays the **Install** window.



- From this window, click **Client Software with PC M-Unit**. The system displays the **Installation** window. Follow the screen prompts which requires minimal user interaction until the installation is complete.



- Click **Finish**. The E-Plex FIPS-201 software is now installed.
- Click **Back** on the install window.

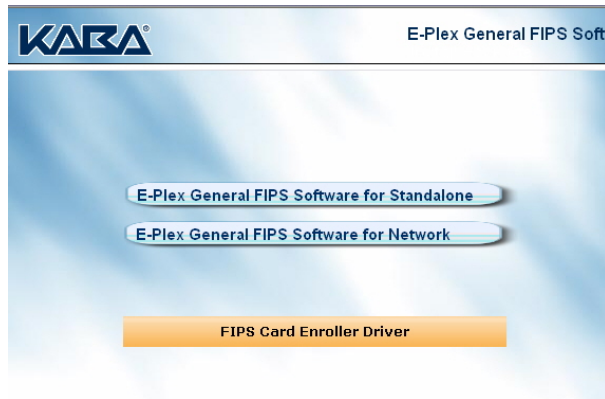


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**Note:** In future If you need to install only the PC M-Unit program on additional Netbook PC(s), click **PC M-Unit only** and install only this module.

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- Click **Back** again and the system returns to the main **E-Plex FIPS-201 Access Control Software Install Package** browser menu.



### **Smartcard Driver Installation**

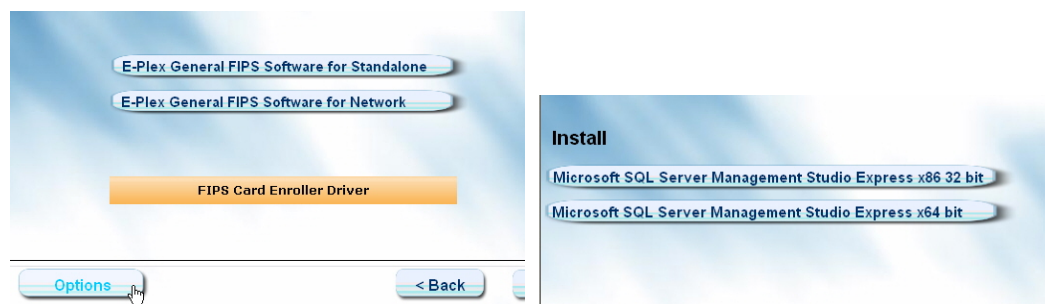
The Smartcard enroller currently used is an **SCM Microsystem's SDI010** model. After installing all main applications related software, click on "**FIPS Card Enroller Driver**" to install the smart card enroller driver.

- When the installation is complete, the system displays the **InstallShield Wizard Complete** window; click **Finish** when installation is completed.

---

**Note:** There are also a couple of optional "hidden" utility programs included on the CD - > "Microsoft Studio SQL Server Management Studio Express" for both 32 bits and 64 bits OS. This can be used as SQL database diagnostics tool. These programs can be installed from this main screen but they are hidden. From this main install menu, pressing the "Insert" key on the PC keyboard will display this hidden "Options" tab to select and install these two programs; pressing the "Insert" key again will hide this "Options" tab.

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- Click **Exit** to leave the installation menu since all modules are installed now.
  - **Important:** Restart your computer to activate all the installation changes.
- 

## **Configuring CoreStreet Server Validation Extension Settings – (applicable to FIPS-HIGH ASSURANCE only)**

In the **E-Plex FIPS-201 HIGH ASSURANCE** version (Full Featured) of the software, the user's FIPS-201 credential's termination or cancellation from its issuing agency can be checked any time by using the OCSP (Online Certificate Status Protocol) online card

revocation functionality of the software and the system. This feature is not available in the **E-Plex FIPS General** version (Lite) of the software. If you are using the HIGH ASSURANCE version, you must first configure the “CoreStreet Path Builder Server Validation Extension” settings accurately for this OCSP dynamic checking to work correctly.

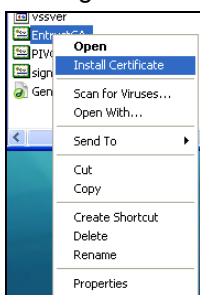
**Important:** Please check with your local IT personnel to set up properly the FIPS-201 card’s root certificate, the card issuer’s info, the OCSP responder’s info and other associated info required to connect to the OCSP properly. This info must be obtained from your facility’s IT or security personnel who issued your FIPS-201 credentials since Kaba does not have this proprietary info.

Here is an example and **example only** on how to configure this, using CoreStreet’s demo sample root certificates – “EntrustCA.cer”, “PIVCA.cer” and “signature.cer” and CoreStreet’s demo OCSP responder - ”ocsp.corestreet.com”. You must do a similar setup with **your** FIPS ID cards’ actual root certificates and related responder info.

Complete the following steps to configure the CoreStreet Validation Extension Settings **for this example**.

## Certificate Installation

1. In Windows Explorer, browse to C:\Program Files\KABA\E-Plex FIPS-201\MainClient.
2. Complete the following steps of each of these root certificates – **EntrustCA.cer** and **PIVCA.cer**.
3. Right-click the certificate and select **Install Certificate**.



The system displays the **Certificate Import Wizard**.



4. Click **Next**.
5. Select **Place all certificates in the following store**.
6. Click **Browse**. The system displays the **Select Certificate Store** window.



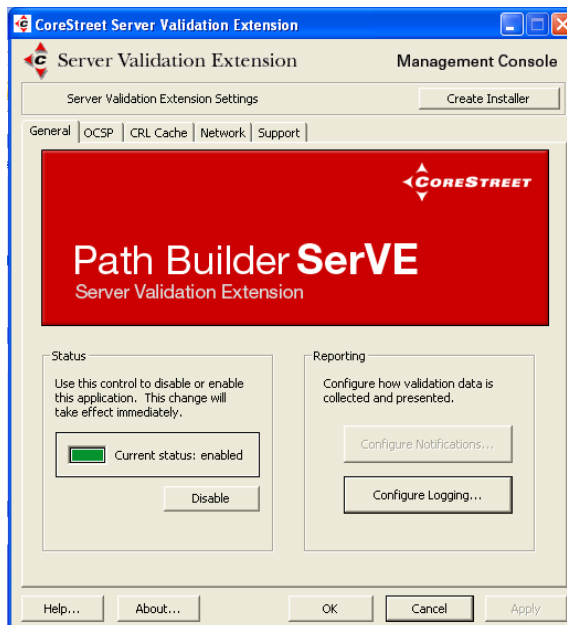
7. Select **Show physical stores**.
8. Select **Trusted Root Certification Authorities | Local Computer**.
9. Click **OK**. The system returns to the **Certificate Import Wizard** window.
10. Click **Next**. The system completes the Certificate Import Wizard.
11. Click **Finish**. The system confirms that the import was successful.



12. Click **OK**.
13. Repeat steps 3–12 for the other certificates.

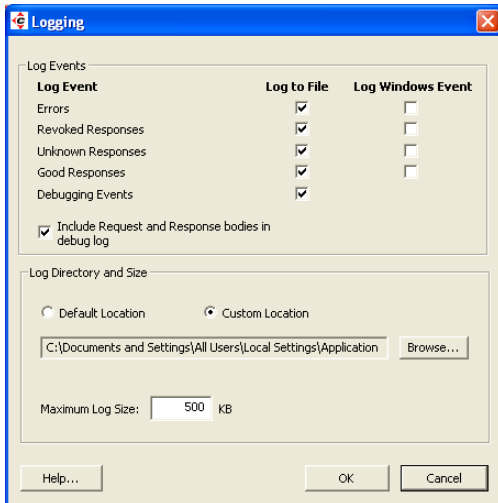
## CoreStreet Server Validation Extension (for FIPS-HIGH ASSURANCE only)

14. In Windows Explorer, browse to <C>:\Program Files\CoreStreet\Validation Client\
15. Launch the **mconsole.exe** program by double clicking it. The system displays the **CoreStreet Server Validation Extension** window.



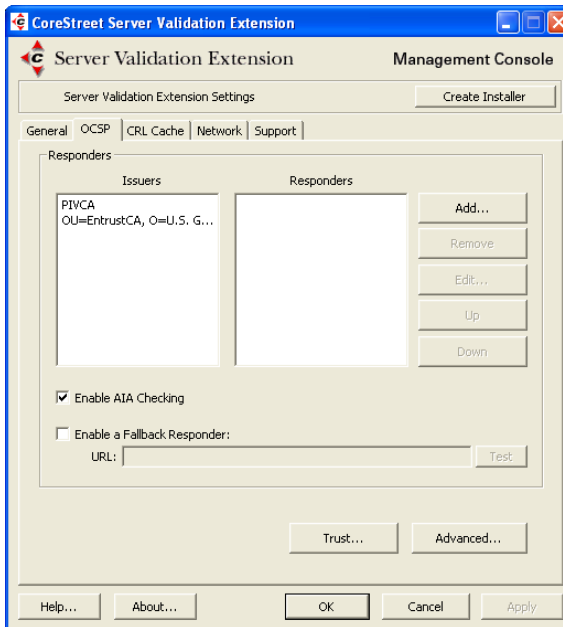
16. Click **Configure Logging**. The system displays the **Logging** window.
17. Verify that the options shown below are selected.



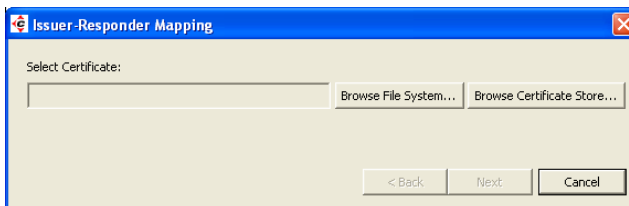


18. Click **OK**. The system returns to the **CoreStreet Server Validation Extension** window.

19. Select the **OCSP** tab. Between the next steps 20 – 26, for each root certificate issuer you must also configure an OCSP responder.

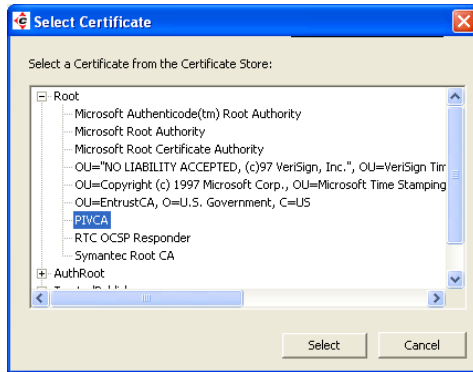


20. Click **Add**. The system displays the **Issuer-Responder Mapping** window.



21. Click **Browse Certificate Store**.

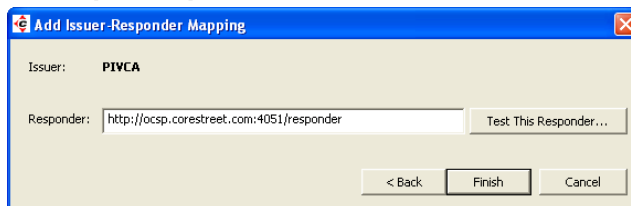
22. Expand **Root** and select **PIVCA**.



23. Click **Select**. The system returns to the **Issuer-Responder Mapping** window.

24. Click **Next**.

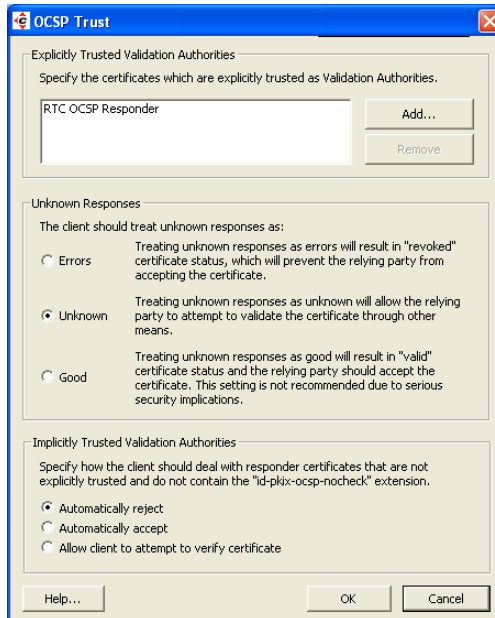
25. Complete the **Responder** field by typing this info exactly as shown:  
**http://ocsp.corestreet.com**



26. Click **Finish**. The system returns to the **CoreStreet Validation Extension** window.

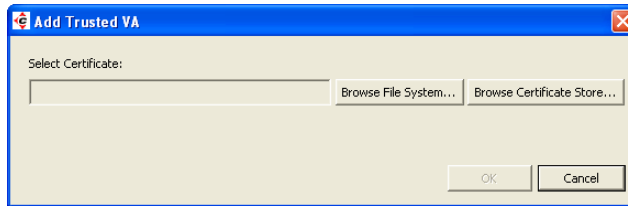
27. Repeat steps 20–26. This time, in step 22, select **OU=EntrustCA, O=U.S. Government, C=US**.

28. Click **Trust**. The system displays the **OCSP Trust** window.



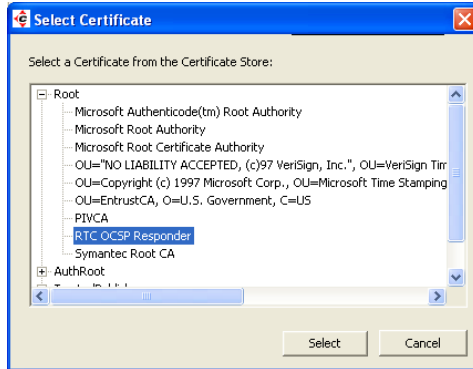
For the Unknown Responses selection, leave the “Unknown” box checked but the other two boxes unchecked. For Implicitly Trusted Validation Authorities selection, leave the “Automatically Rejected” box checked but the other two boxes unchecked.

29. Click **Add**. The system displays the **Add Trusted VA** window.

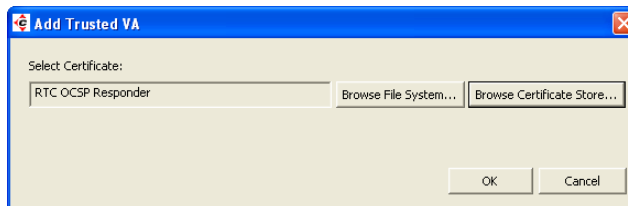


30. Click **Browse Certificate Store**.

31. Expand **Root** and select **CoreStreet Partner Validation Authority**.



32. Click **Select**. The system returns to the **Add Trusted VA** window.

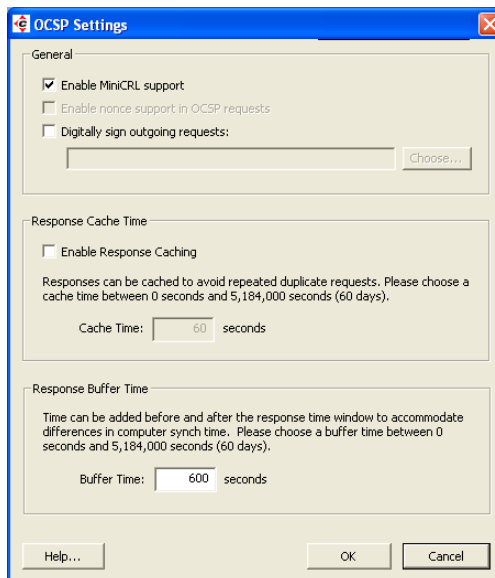


33. Click **OK**. The system returns to the **OCSP Trust** window.

34. Click **OK**. The system returns to the **CoreStreet Validation Extension** window.

35. Click **Advanced**. The system displays the **OCSP Settings** window.

36. Verify that the options shown below are selected.



37. Click **OK**. The system returns to the **CoreStreet Validation Extension** window. No changes should be made to the other tabs of the window.

38. Click **Apply** and then **OK**.

39. All parts of the software installation are completed now and you should be ready to

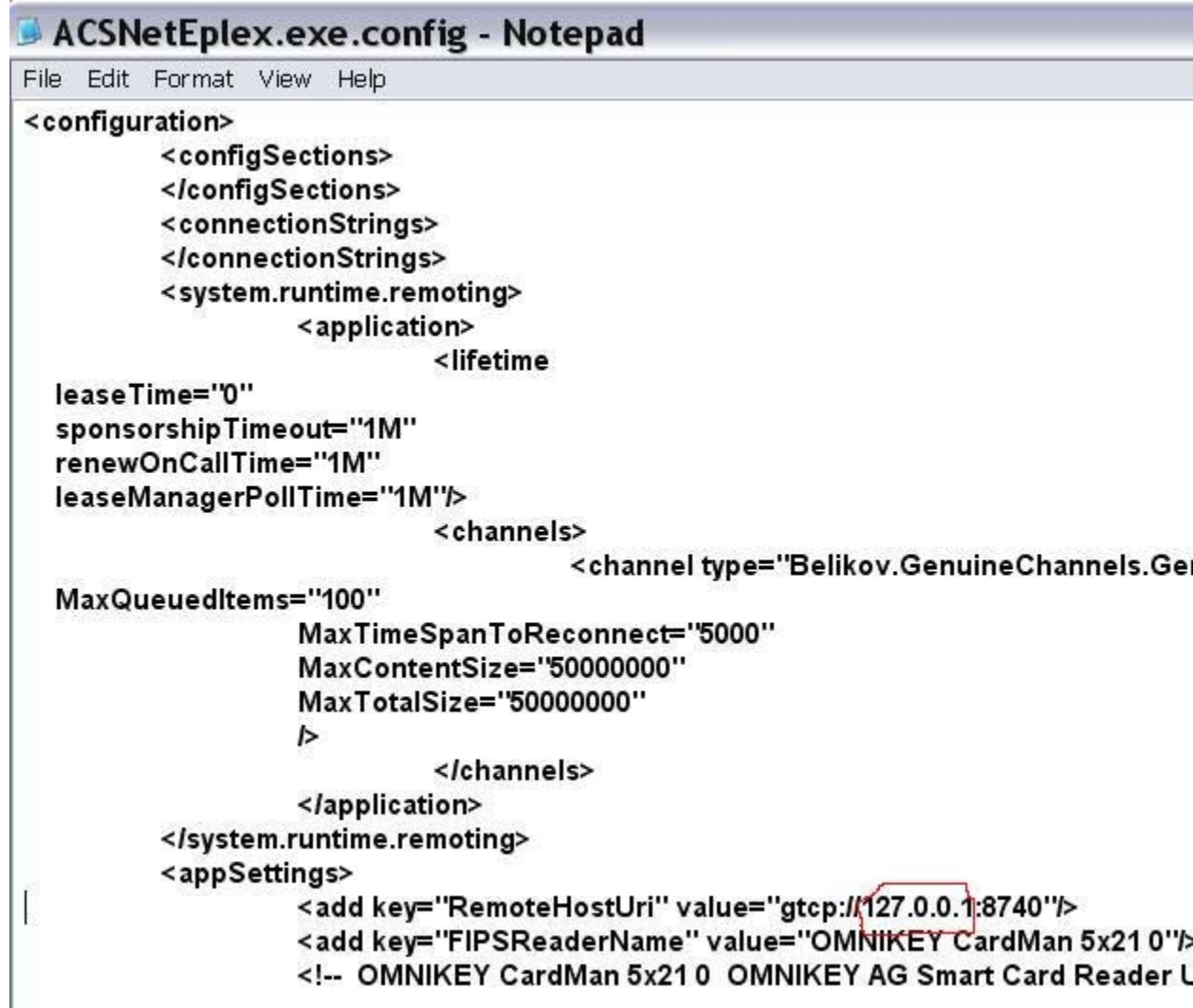
run and use the E-Plex FIPS-201 software.

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### **Dedicated Server PC IP Address for Networked Installation:**

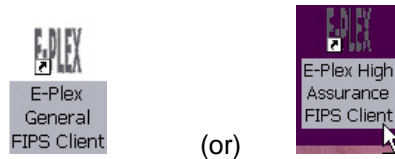
**Important:** Please consult with your IT personnel on network installation of the E-Plex FIPS software involving a dedicated Server PC and other multiple Client PCs.

- By default, each E-Plex FIPS Client PC's configuration file IP address will point to "127.0.0.1" as the remote Host's (Server PC's) IP address. You must edit this text file using a text editor such as "Notepad" and replace this default IP address with the actual Server PC's IP address.
- If the Client part of the software was installed in the default path of the Client PC "C:\Program Files\Kaba\E-Plex FIPS\Main Client", go to this directory and open the configuration file "ACSNetEplex.exe.config" with the Notepad.
- Replace the default IP address value "127.0.0.1" of "RemoteHostUri" with the actual IP address value, such as "10.106.15.44" (example IP address only); save the file and close. Repeat this in each Client PC in your facility.
- The following screen shot shows where exactly the value should be replaced in the client configuration file.



```
ACSNetEplex.exe.config - Notepad
File Edit Format View Help
<configuration>
  <configSections>
  </configSections>
  <connectionStrings>
  </connectionStrings>
  <system.runtime.remoting>
    <application>
      <lifetime>
        leaseTime="0"
        sponsorshipTimeout="1M"
        renewOnCallTime="1M"
        leaseManagerPollTime="1M"/>
      <channels>
        <channel type="Belikov.GenuineChannels.Ge
MaxQueuedItems="100"
      MaxTimeSpanToReconnect="5000"
      MaxContentSize="50000000"
      MaxTotalSize="50000000"
    />
    </channels>
  </application>
</system.runtime.remoting>
<appSettings>
  <add key="RemoteHostUri" value="gtcp://127.0.0.1:8740"/>
  <add key="FIPSReaderName" value="OMNIKEY CardMan 5x21 0"/>
  <!-- OMNIKEY CardMan 5x21 0 OMNIKEY AG Smart Card Reader L
```

- 
- The Custom/Network install of the software is completed now including the installation of the smartcard enroller driver.
  - **Important:** You must restart the PC after which you should be ready to launch and use the E-Plex FIPS-201 software by clicking the ***E-Plex FIPS General (or, FIPS High Assurance) Client icon*** from your PC desktop.
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- Now please go back to the Chapter, **“2. Getting Started”** and resume from the Section, **“Starting the E-Plex FIPS-201 Server and Client Software on the PC.”**





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