



ClockComm

Communications Module



USER GUIDE

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Chapter 1

INTRODUCTION

Micronet Ltd. takes pride in delivery of its products and makes every endeavor to ensure its clients full satisfaction.

On behalf of the whole Micronet team, we would like to thank you for purchasing our products, and we are certain you will find them more than beneficial to your organization. We are at your service.

The Micronet Team.

1.1. ABOUT MICRONET LTD.

Established in 1982, Micronet Ltd. specializes in the development and manufacture of portable data collection systems. Micronet is dedicated to the complete satisfaction of our customers worldwide.

Our products comply with the highest international quality standards. Hundreds of thousands of our units are already installed and working around the globe, and have demonstrated consistent reliability over time.

For more information about Micronet Ltd., see our website at www.micronet.co.il.

1.2. CLOCKCOMM – THE COMMUNICATIONS APPLICATION

ClockComm is the communications application that supports Micronet InTagral Time Clocks. The software provides various functions, the main of which can be divided into two major groups as follows:

1. Communication between the host PC and the time clock:
 - Different data files upload/download and deletion
 - Online Querying and Response
 - Clock firmware updating
2. Configuration of the time clock's functions:
 - Intelligent scheduler-controlled Entry/Exit registering and control
 - Clock key mapping configuration for quick-access short cut keys
 - Date and time setting including DST
 - Employee-card variables definition

- Password setting
- Fingerprint-Identification management
- Electrical relay control and scheduler (for external devices such as an electrical bell, an electrical door lock etc.)
- Door opening code and duration setting
- And more...

1.3. CLOCKCOMM CONTROL BUTTONS

This paragraph introduces the ClockComm Control buttons.

The ClockComm interface includes the following main control buttons whose functions are unchanged throughout the operation of the ClockComm application:

SET CLOCK BUTTON

After creating a new configuration of one or more clock parameters using the ClockComm interface, use this button (see Figure 1-1) for sending the new configuration from the host PC to update the status of the time clock.



Figure 1-1: The Set Clock Button

UNDO BUTTON

This button (see **Error! Reference source not found.**) restores the current page's settings to its previous state. If previous state does not exist, restores settings to factory default settings.



Figure 1-2: The Undo Button

DOWNLOAD BUTTON

This button (see Figure 1-3) downloads data collected by the time clock into the host PC, to specific files that are pre-defined. Examples of file types that are downloaded are the Entry/Exit Times data file, and



Figure 1-3: The Download Button

UPLOAD BUTTON

This button (see Figure 1-4) uploads data from the host PC into the time clock. Examples of data that is uploaded is the Employees Data, Authorized Employees List, Task List etc.



Figure 1-4: The Upload Button

OK BUTTON

This button (see Figure 1-5) confirms the settings of the active window and closes the window.

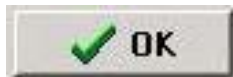


Figure 1-5: The OK Button

CANCEL BUTTON

This button (see Figure 1-6) discards the settings of the active window and closes the window.



Figure 1-6: The Cancel Button

Chapter 2

INSTALLATION

The ClockComm Communications module runs on a standard PC (the “**host PC**”), and can operate either independently, or together with a Time & Attendance application (such as **OnTime Pro**), that enables more sophisticated analysis and use of the gathered information.

2.1. INSTALLATION ON THE HOST PC

Insert the ClockComm installation CD into the host PC CD-ROM drive. The ClockComm installation process begins automatically.

Follow instructions step by step as presented to you by the Installation Program.

When installation is complete, go to Windows Desktop and double-click the

ClockComm  icon:

The *Connections & Configuration* window appears (see Figure 2-1).

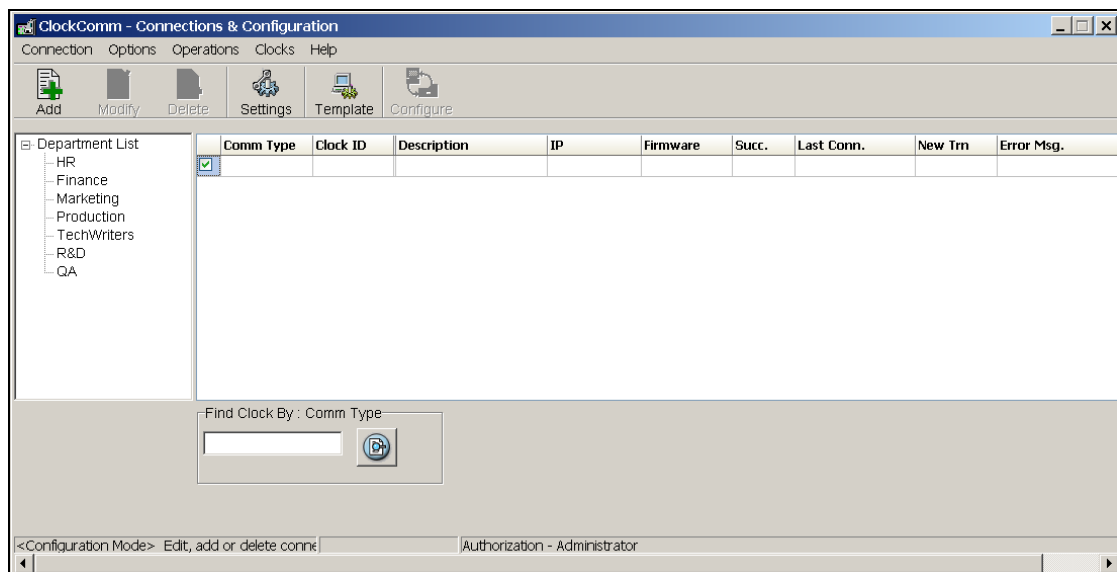


Figure 2-1: Connections and Configuration window

NOTE

If the ClockComm application is used together with the OnTimePro, it can also be accessed through the OnTimePro setup screens. For more information see the OnTimePro user manual.

The ClockComm package contains two versions of the software. *Configuration Clock*, which enables all the control and configuration options of the time clock, and *Download Transactions*, which allows access only to the transaction download function. Only the *Download Transaction* has a desktop shortcut, to limit unauthorized personnel from accessing the clock's configuration and control options. The *ClockComm* application can still be reached through **Start→Programs →ClockComm** and clicking the '*Configuration Clock*' icon in the program list. The full filenames of these two files are:

- Configuration Clock – **ClockComm.exe#1**
- Download Transaction – **ClockComm.exe#2**

Chapter 3

CLOCKCOMM CONFIGURATION

3.1. GENERAL

Run the ClockComm application (see paragraph 2.1). The *ClockComm Connections & Configuration* window appears (see Figure 3-1).

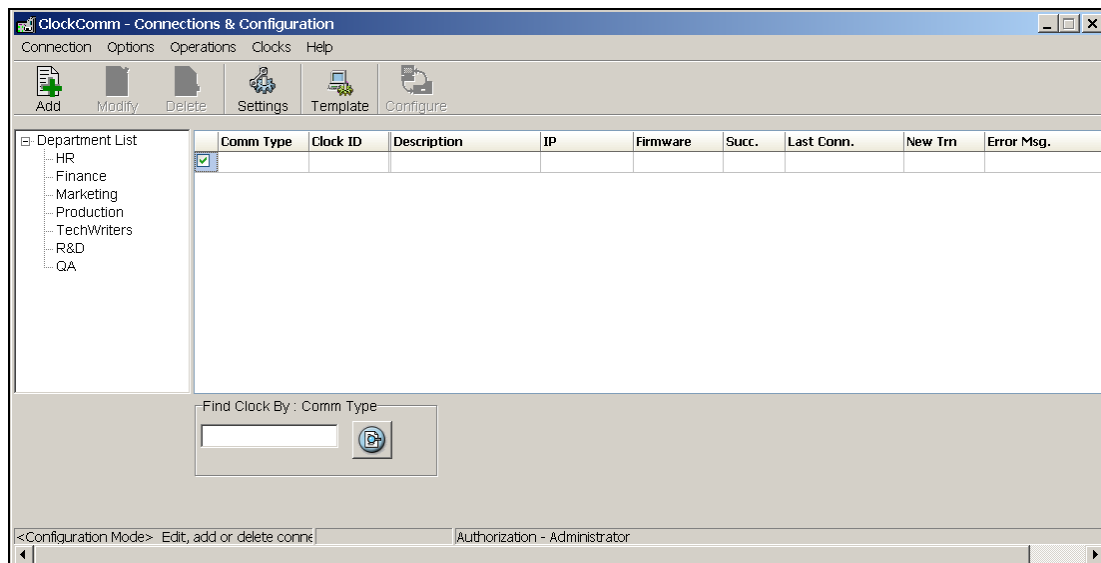


Figure 3-1: ClockComm Connections & Configuration window

The ClockComm Connections & Configuration window is comprised of the following main elements:

- **Main toolbar** – contains ClockComm main operation buttons
- **Department List navigation tree** - enables navigating between different departments' registered clocks
- **Clocks Display Pane** – displays all registered clocks (of the selected department)
- **Find Clock by: [Column]** – enables searching a specific clock within the selected table column (see paragraph 3.6)

3.2. LISTING CLOCKS BY DEPARTMENT

The ClockComm application enables categorizing time clocks by department. This feature allows great flexibility in finding, configuring, and managing the organization's time clocks. Managing the ClockComm department list is done through the left pane in the Connections & Configuration window (see Figure 3-1). This pane holds the Department List navigation tree. The navigation tree enables easy browsing through the listed departments. It also enables adding, renaming, and deleting departments.

3.2.1. Adding a Department

To add a new department to the Department List navigation tree, perform the following steps:

- 1 Click the **Department List** tag in the tree (the root level) to make it active
- 2 Right click **Department List** tag (the same tag as in step 1)
- 3 Click **Add**
- 4 A new record named **New department** is added to the navigation tree

3.2.2. Renaming a Department

To rename a department, perform the following steps:

- 1 Click the selected department in the Department List navigation tree to make it active
- 2 Right click the same department
- 3 Click **Rename**
- 4 Type in the department's new name
- 5 Hit the **Enter** key to set the new name

3.2.3. Deleting a Department

To delete a department, perform the following steps:

- 1 Click the selected department in the Department List navigation tree to make it active
- 2 Right click the same department
- 3 Click **Delete**

3.2.4. Displaying all Listed Time Clocks

Click the **Department List** tag (the root level of the tree) to display all the organization's listed time clocks.

3.2.5. Displaying a Department's Time Clocks

To display a certain department's listed time clocks do the following:

- 1 Click the '+' sign to the of the *Department List* tag to display all listed departments
- 2 Click the required department
- 3 All the department's listed time clocks are displayed

3.3. ADDING A TIME CLOCK

This section describes the process of adding a new time clock to the time clock list, held by the ClockComm software.

As part of the configuration process, specifying the communications method between the clock and the host PC is required.

ClockComm supports four different methods of communications between time clocks and a Host PC:

- Direct (via RS232 parallel cable)
- Modem (via an internal or external modem)
- RS485 network (via a RS485)
- TCP/IP (via LAN cable for Internet or Intranet communication)

To specify the communication method, do the following:

In the *Connections & Configuration* window toolbar (see Figure 3-2) click the Add button (or go to the *Options* menu (see Figure 3-2) and from the pull-down menu choose *Add*).

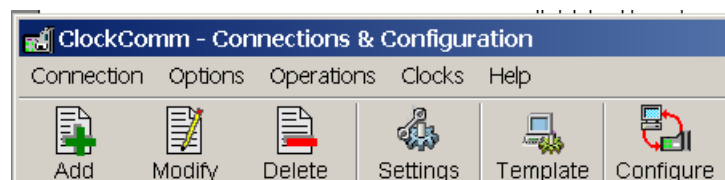


Figure 3-2: Connections & Configuration window toolbar

The Add Clock window appears (see Figure 3-3):

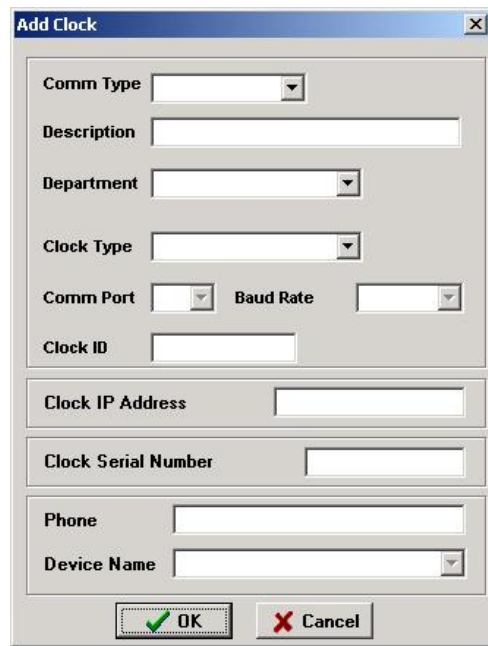


Figure 3-3: Add Clock Window

The following table describes the different window fields:

Table 3-1: Add Record Window

TAG	DESCRIPTION
<i>Comm Type</i>	The method of communication between the host PC and the time clock. Possible options are: Direct (RS232), Modem, RS485 , and LAN
<i>Department</i>	Assigns the added clock to selected department (use drop down list to select department).
<i>Description</i>	Operator's short description of the added time clock.
<i>Clock type</i>	The added time clock model. Possible options are: <i>InTagral, InTagral Plus or InTagral Light.</i>
<i>Comm Port</i>	The host PC's Comm port that is assigned to the added time clock.
<i>Baud Rate</i>	The chosen rate of data transfer. Possible Options are: 115200, 57600, 38400, 19200, and 9600 Baud.
<i>Clock ID</i>	An ID number that will be assigned to the added time clock. A valid ID must contain four Alphanumeric digits.
<i>Clock IP Address</i>	The added clock's assigned IP address. Available only when LAN is used.

Table 3-1: Add Record Window

TAG	DESCRIPTION
<i>Clock Serial Number1</i>	The added clock's serial number.
<i>Phone</i>	The phone number to be dialed. Available only with modem connection.
<i>Device Name</i>	A list of all available modems.

The following paragraphs provide instructions for configuring the added time clock with each of the four communication methods.

3.3.1. Direct Communications method

To add a new time clock using the Direct Communication (RS232) method, do the following:

- 1 From the *Comm Type* drop-down list (see Figure 3-2), select **Direct**.
- 2 In the *Description* field, type a short description or name of the added time clock
- 3 *Select the Clock Type (for example, InTagral Plus).*
- 4 *Verify that the Comm Port field is set to 1 or 2 (depending on the RS232 port to which you have connected the direct cable)*
- 5 *Verify the Baud Rate is set to 115200 (this is the default rate).*
- 6 *In the Clock ID field enter a four character Alphanumeric value of your choice.*

- 7 Click the  button.

The Add Record window closes, and the new time clock record appears on the clock list in the Connection & Configuration window (see Figure 3-4).

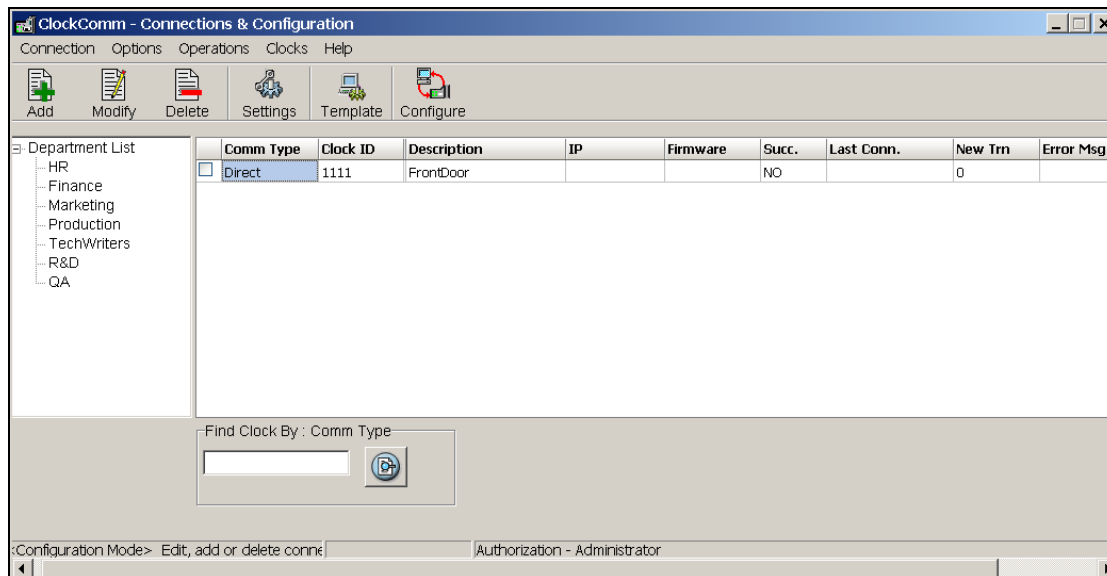



Figure 3-4: New Time Clock added to clock list

3.3.2. Modem Communications method:


To add a new time clock using the modem Communication method, do the following:

- 1 From the *Comm Type* drop-down list (see Figure 3-2), select **Modem**.
- 2 In the *Description* field, type a short description or name of the added time clock
- 3 Select the *Clock Type* (for example, *InTagral Plus*).
- 4 In the *Clock ID* field enter a four character Alphanumeric value of your choice.
5. In the *Phone* field, enter the telephone number of the modem that is connected to the time clock.
6. From the *Device Name* drop-down list, choose the host PC's modem that will be used.
- 7 Click the  button.

The Add Record window closes, and the new time clock record appears on the clock list in the Connection & Configuration window.

3.3.3. RS485 Communications method:


To add a new time clock using the RS485 Communication method, do the following:

1. From the *Comm Type* drop-down list (see Figure 3-2), select **RS485**.
2. In the *Description* field, type a short description or name of the added time clock
3. *Select the Clock Type (for example, InTagral Plus).*
4. Verify that the Com Port field is set to 1 or 2 (depending on the port to which you have connected the RS485 cable).
5. *In the Clock ID field enter a four character Alphanumeric value of your choice.*
6. In the Clock Serial Number field, enter the unique time clock Serial Number (by manufacture).
7. Click the  button.

The Add Record window closes, and the new time clock record appears on the clock list in the Connection & Configuration window.

3.3.4. LAN (TCP/IP) Communications method:

To add a new time clock using the LAN Communication method, do the following:

1. From the *Comm Type* drop-down list (see Figure 3-2), select **LAN**.
2. In the *Description* field, type a short description or name of the added time clock
3. *Select the Clock Type (for example, InTagral Plus).*
4. *In the Clock ID field enter a four character Alphanumeric value of your choice.*
5. In the Clock IP Address field, enter a valid Clock IP Address. Obtain this IP Address from your System Administrator.
6. Click the  button.

The Add Record window closes, and the new time clock record appears on the clock list in the Connection & Configuration window.

NOTE:

One Host PC can communicate with a number of InTagral™ clocks using different communication modes.

3.4. MODIFY

The Modify *Record* window is similar in its form to the *Add Record* window, and simply holds all of the selected clock's communication data. Simply modify the required data. Use Table 3-1 for term explanations, and the paragraphs that follow it for setting instructions.

NOTE

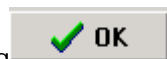
In the Modify window, the parameters *Comm Type* and *Clock ID* cannot be changed

3.5. DELETE

Use this button to delete a record (time clock) from the list as follows:

1. Check the clock that is intended for deletion (check box in the beginning of the line).
2. Click the Delete button.

3. Confirm the deletion by clicking




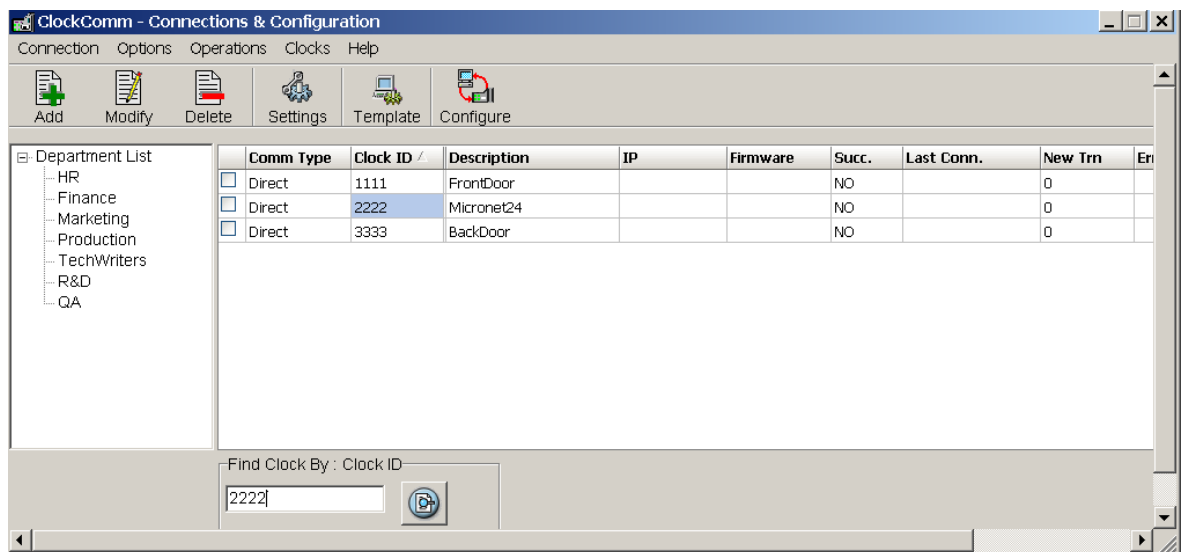
3.6. SEARCHING A CLOCK

The ClockComm application allows searching for a specific time clock within the displayed department.

The search tool searches only within the selected column in the clocks table.

To find a time clock by the Clock ID column, do the following:

- 1 Select the relevant department in the Department List navigation tree.
- 2 Click the ***Clock ID*** column header (this sorts the clock by ID, and enables search within that column)
- 3 Click within the ***Find Clock by: [Column]*** text box to enable it
- 4 Type in the sought clock's ID number (search is case-insensitive)
- 5 Click the search  button
- 6 The sought clock's ID is highlighted in the table (if ID number does not exist, the display does not change)



NOTE

To search by another column, repeat steps 1 to 6 above; in step 2, simply select the requested column. Notice the title changes accordingly in the ***Find Clock By:*** section, above the search text box.

Chapter 4

CONFIGURATION OPTIONS

Configuring a time clock can be done in two ways:


- Creating a configuration template (does not require connection to a time clock), and uploading the saved configuration to selected time clocks. This option enables easy configuring of multiple clocks in one click.
- Configuring a single time clock directly (requires connection with a specific clock)

4.1. CONFIGURING CLOCKS BY TEMPLATE

Configuring one or more clocks using a pre-configured template makes the configuration process effective and flexible. The whole configuration setting is done offline (no connection to a time clock is needed). After creating and saving a template, loading the settings to multiple selected clocks is only a click away.

4.1.1. Creating a Configuration Template

To create a configuration template, perform the following steps:

- 1 In the main ClockComm toolbar, click the **Template** button
- 2 The **Configuring InTagral Clocks** window appears
- 3 Set clock's configuration (see paragraph 4.3 for detailed configuring information)
- 4 Select **Configuration**→**Save Configuration** in the menu bar
- 5 Type in a name for the .cgf file
- 6 Click the **Save** button
- 7 Click the Close Window  button to return to the ClockComm main window

NOTE

*Clicking the **Template** button always opens the **Configuring InTagral Clocks** window with a Micronet default configuration.*

4.1.2. Loading a Configuration Template

This function is needed when operator wishes to use an existing template as a basis to a new configuration template.

To load a configuration template, perform the following steps:

- 1 In the main ClockComm toolbar, click the **Template** button
- 2 The **Configuring InTagral Clocks** window appears
- 3 Select **Configuration→Load Configuration** in the menu bar
- 4 Select the .cfg file to load
- 6 Click the **Open** button
- 7 The configuration template is loaded (for details about making the required changes, and saving the new template, see paragraph 4.1.1)

4.1.3. Uploading Configuration to One or More Clocks

To upload a configuration template to one or more time clocks, perform the following steps:

- 1 In the Clocks Display pane, click **Department List** to display all listed clocks, or click a selected department, to show only this department's clocks.

NOTE

To upload a configuration to clocks belonging to **different departments**, click **Department List** to display all listed clocks, and check the required clocks' checkboxes.

- 2 Check the required clocks' checkboxes
- 3 Select **Operations→Load Clocks Configuration** in the menu bar
- 4 Select the required .cfg file
- 5 Click the **Open** button
- 4 The selected configuration is uploaded to all selected clocks

4.2. CONFIGURING A SINGLE CLOCK

To configure a single clock without using a configuration template, perform the following steps:

- 1 In the Clocks Display pane click required clock
- 2 Click the **Configure** button; the **Configuring InTagral Clocks** window appears. The ClockComm application connects to the selected time clock.
- 3 Set clock's configuration (see paragraph 4.3 for detailed configuring information)

- 4 Upload configuration to clock by selecting **Configuration→Load Configuration** in the menu bar

4.3. SETTING INTAGRAL TIME CLOCKS CONFIGURATIONS

This section describes all configuring options in the *Configuring InTagral Clocks* tabs.

4.3.1. Clock Parameters Tab

The first tab that appears (by default) is *Clock Parameters* (see Figure 4-1). This is a read only tab that displays the following clock data (see Table 4-1):

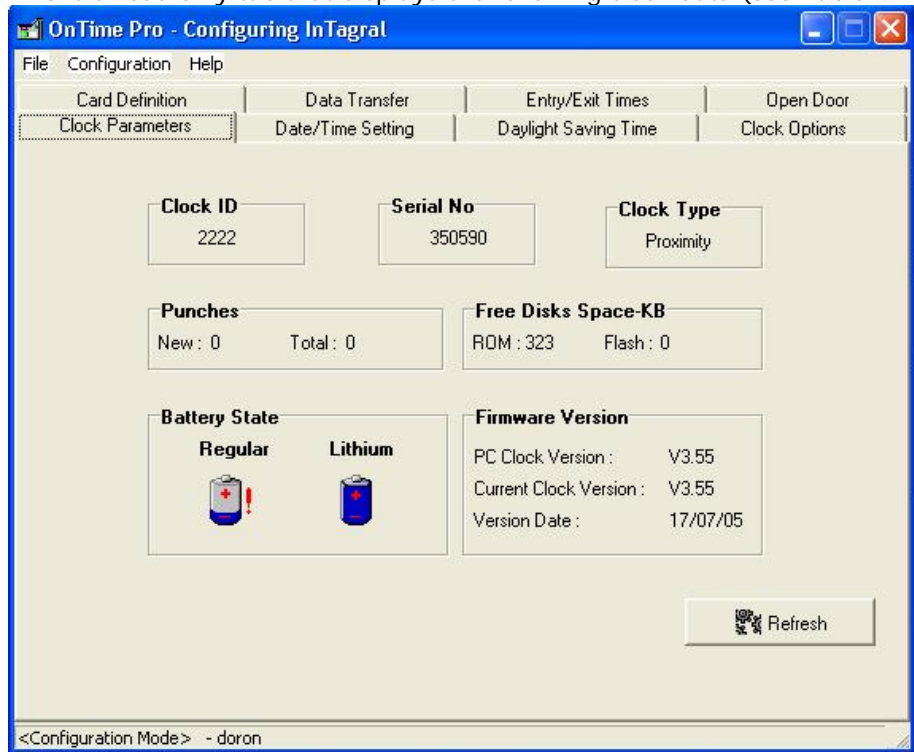


Figure 4-1: Clock Parameters Tab

Table 4-1: Clock Parameters Tab

TAG	DESCRIPTION
<i>Clock ID</i>	The four-digit Alphanumeric clock ID
<i>Serial No</i>	The unique time clock Serial Number

Table 4-1: Clock Parameters Tab

TAG	DESCRIPTION
<i>Clock Type</i>	The type of the time clock's card reader (for example 'Proximity')
<i>Punches</i>	<ul style="list-style-type: none"> • Total – the number of transactions that were listed throughout the clocks life. • New - .the number of transactions since the last transactions download that was done.
<i>Free Disks Space–KB</i>	<ul style="list-style-type: none"> • ROM - Free clock memory left. • Flash - If the time clock is equipped with Flash memory (e.g. the InTagral Plus), indicated free Flash memory left.
<i>Battery State</i>	<ul style="list-style-type: none"> • Regular – regular-mode-battery status. • Lithium – Backup-battery status <p>NOTE</p> <p><i>When a battery's status gets close to 'Empty', a notification appears on the right side of that battery</i></p>
<i>Firmware Version</i>	The Clock's Firmware Version and Version Date.
<i>Refresh</i>	Establishes communication with the clock, and refreshes the displayed information according to recent changes that were made.

4.3.2. Date and Time Settings Tab

The *Date/Time Setting* tab enables configuration of the clock's date and time information. There is an option of setting this information manually through the tab fields, and an option of automatically synchronizing the clock with the host PC's date and time data.

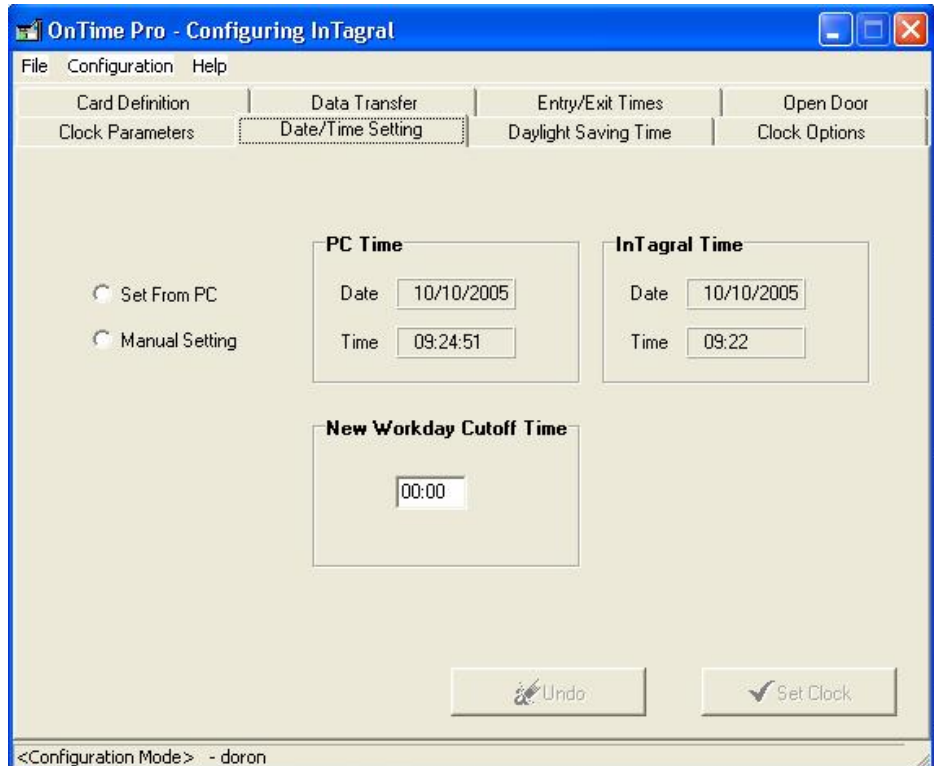


Figure 4-2: Date/Time Setting Tab

NOTE:

InTagral™ time clocks are preset at the factory and delivered to the customer with the proper local date and time of the customer's location.

Table 4-2: Date/Time Setting Tab

TAG	DESCRIPTION
<i>Set From PC / Manual Setting</i>	<ul style="list-style-type: none"> • Set From PC – allows synchronizing the clock with the host PC clock • Manual Setting - for setting the date and time manually, by typing the Date and Time data into the corresponding text boxes in the InTagral Time section <p>After selecting one of the above, click the Set Clock button to update the clock with the new Date and Time.</p>
<i>PC Time</i>	Shows the date and time of the host PC clock.
<i>InTagral Time</i>	Shows the time clock's current date and time.

Table 4-2: Date/Time Setting Tab

TAG	DESCRIPTION
<i>New Workday Cutoff Time</i>	Sets the workday cutoff time. This is the time of day that is defined as the beginning of a new workday. The default time is 00:00.

4.3.3. Daylight Saving Time (DST) Tab

The ClockComm can adjust InTagral™ clocks DST settings.

This is important for correct and reliable data gathering throughout a given year, and dismisses the operator from keeping track of DST once this feature is set.

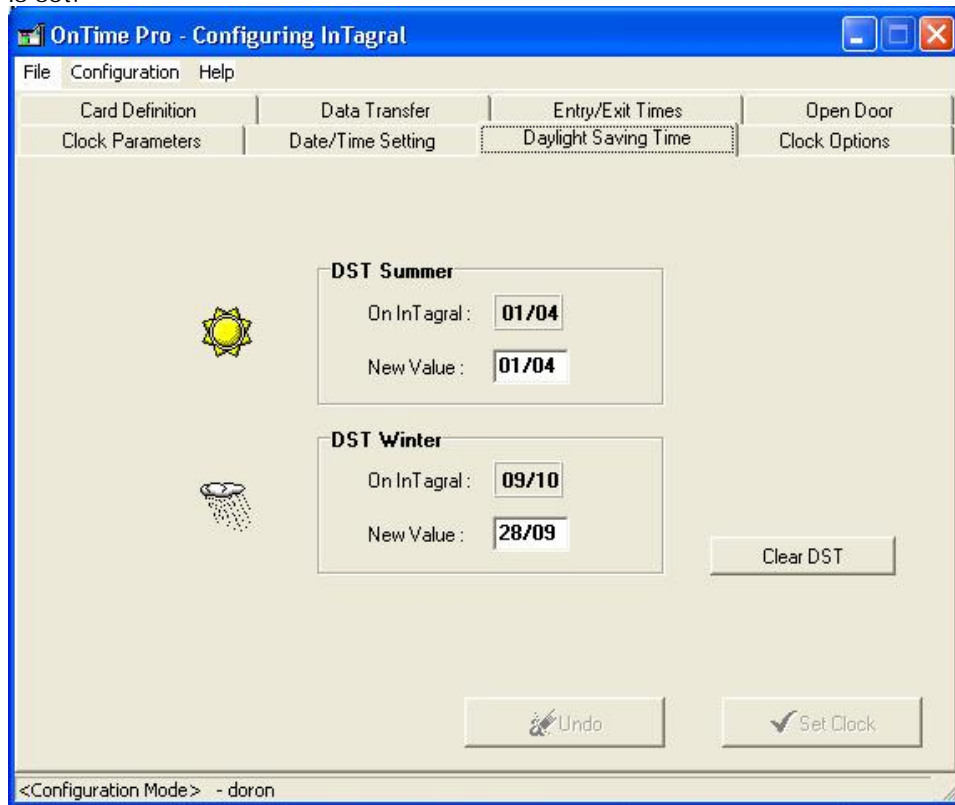


Figure 4-3: Daylight Saving Time tab

Table 4-3: Daylight Saving Time Tab

TAG	DESCRIPTION
<i>DST Summer</i>	DST start date
<i>DST Winter</i>	DST end date

Table 4-3: Daylight Saving Time Tab

TAG	DESCRIPTION
<i>On InTaaraI</i>	The current value in the time clock
<i>New Value</i>	The new settings to be set into the clock
<i>Clear DST</i>	Clears the DST 'New Value' settings

4.3.4. General Clock Options Tab

This tab allows operator access to the following four general clock controls:

- Project Reporting
- Fingerprint
- iLight Options
- Modem

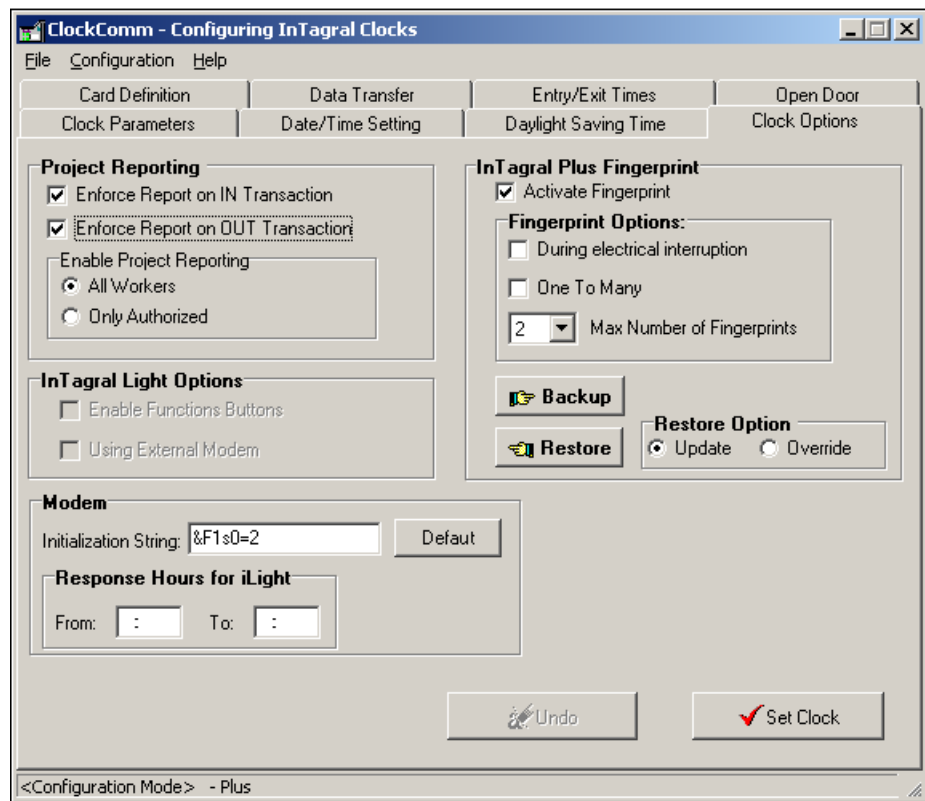
Each of the four controls has its own section in the Clock Options Tab (see Figure 4-4).

Figure 4-4: Clock Options Tab

Each of the four sections is described in a separate table in the following.

PROJECT REPORTING

This section enables the project duration reporting option. The InTagral Plus supports the option of reporting the begin and end times while working on a specific project out



of a list of pre-defined projects. This enables smart time analysis per project, and provides an important management tool.

Project Reporting options are described in the following table:

Table 4-4: Project Reporting

TAG	DESCRIPTION
<i>Project Reporting</i>	Enables the Project Reporting option. When checked, operator must select the persons who will be allowed to report project times.
<i>Enforce Report on IN Transaction</i>	When this option is selected, any time an employee starts an IN transaction, the clock displays the list of projects from which the employee can select the desired one.
<i>Enforce Report on Out Transaction</i>	When this option is selected, any time an employee starts an OUT transaction, the clock displays the list of projects from which the employee can select the desired one.

Table 4-4: Project Reporting

TAG	DESCRIPTION
<i>Enable Project Reporting</i>	<ul style="list-style-type: none"> • All Workers – all employees can report project times. • Only Authorized - only authorized employees can report project times. The Authorized Employees list per project is set through the operator's Time & Attendance application (e.g. Micronet's OnTime Pro).

ILIGHT OPTIONS

This section is only available when connected to InTagral Light time clock.

Table 4-5: iLight Options

TAG	DESCRIPTION
iLight Options	<ul style="list-style-type: none"> • Enable Function Buttons – enables the iLight's shortcut function buttons. • Using External Modem – enables external Modem connection to the iLight time clock.

FINGERPRINT

This section allows set-up of general Fingerprint Identification options (available only when connected to InTagral Plus Time Clock).

Table 4-6: Intagral Plus Fingerprint

TAG	DESCRIPTION
<i>Activate Fingerprint</i>	Enables the Fingerprint Identification system.
<i>Fingerprint options</i>	<p>This sub-section allows set-up of the following options:</p> <ul style="list-style-type: none"> • During electrical interruption – when checked, the clock will continue to operate fingerprint identification (for security reasons). Checking this function shortens battery life considerably during the electrical blackout. • One to Many – when checked, the clock requires only an employee’s fingerprint for identification. It compares the print to all the fingerprints it has stored in its memory. When Unchecked, the clock uses One-to-One identification. This means the employee needs to first swipe the card/enter PIN number, AND then use his fingerprint. The clock then matches the card number with the fingerprint and does the identification. • Max number of fingerprints – this feature allows keeping up to five different fingerprints per employee. Use Combo-Box to select the required value (between 1 and 5). Micronet recommends to set the value of this parameter to 2. This parameter affects also the fingerprint ini file.
<i>Backup</i>	Creates a backup file of all fingerprint data on the host PC.
<i>Restore</i>	Uploads fingerprint data from the host PC into the time clock.
<i>Update</i>	When this option is selected, clicking the Restore button updates the existing fingerprint data without erasing it fully. That means that the old fingerprint data of an employee can be replaced by a new version of his/her fingerprint and an entirely new fingerprint data can be added.
<i>Override</i>	When this option is selected, clicking the Restore button erases all the previous fingerprint data and replaces it with the new data.

MODEM

This section allows set-up of general Modem options.

Table 4-7: Modem

TAG	DESCRIPTION
<i>Init String</i>	Init string – the Modem vendor recommends using to initialize the clock’s modem using the following link: http://www.multitech.com/PRODUCTS/Categories/Device_Networking/global_modems/approvals.asp?country=All&product=MT5600S MI.
<i>Response Hours for iLight</i>	Sets a time frame for enabling Modem communication with the InTagcl Light time clock. From – start of time frame To – end of time frame

4.3.5. Card Definitions Tab

This tab allows operator access to different employee-card parameter settings, as described in the following table. This tab also holds the Clock ID parameter.).

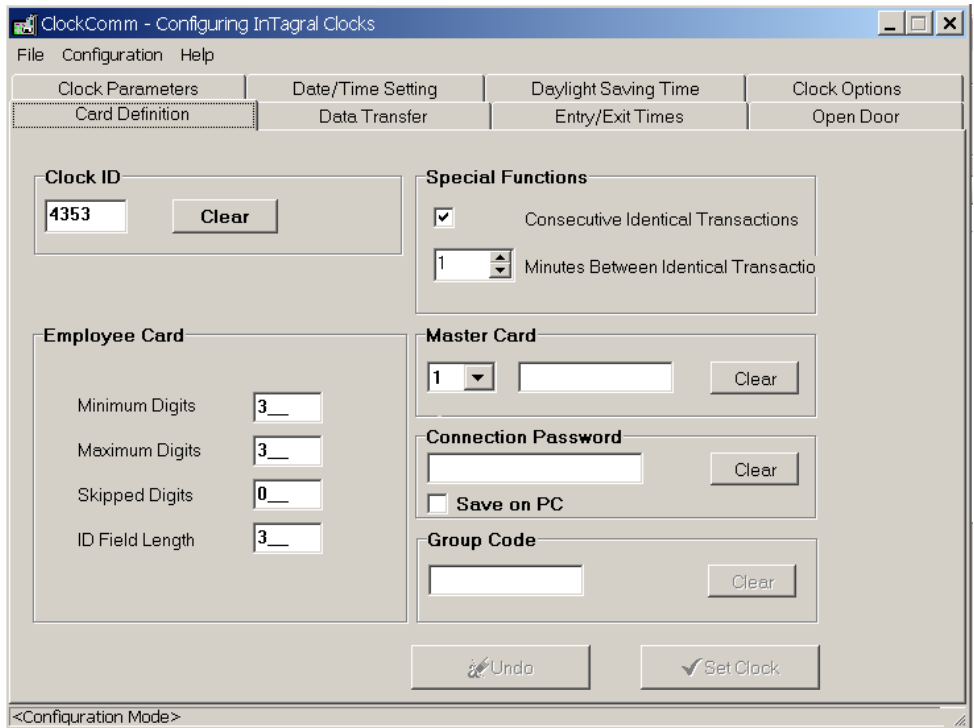


Figure 4-5: Card Definition Tab

EMPLOYEE CARD

This section allows set-up of the ID number reading options.

Table 4-8: Employee Card

TAG	DESCRIPTION
<i>Minimum digits</i>	Minimum number of digits allowed for an ID card
<i>Maximum Digits</i>	Maximum number of digits allowed for an ID card
<i>Skipped Digits</i>	Number of digits not used for identification. The time clock skips the number of digits specified, starting from the MSB (Most Significant Bit).
<i>ID Field Length</i>	Number of digits the time clock reads for identification, starting from the LSB (Least Significant Bit).

SPECIAL FUNCTIONS

ClockComm can block a transaction if it repeats itself over a short period of time. For example, it can prohibit an employee from making two Entry transactions in a period of less than 10 minutes.


Table 4-9: Special Functions

TAG	DESCRIPTION
<i>Consecutive Identical Transactions</i>	Enables the Consecutive Identical Transactions function.
<i>Minutes between Identical Transactions</i>	Sets the number of minutes after the first transaction in which to prohibit repetition of that transaction by the same employee.

MASTER CARD

This section allows operator to create up to three Master (Supervisor) Cards. Each of these cards enables access to the clock's supervisor menu.

Table 4-10: Master Card

TAG	DESCRIPTION
 <i>Dropdown</i>	Selects the Master card to define (out of 3 possible cards).
<i>Free text box</i>	Type the full card number here. This card will become a Master Card after clicking the Set Clock button.

GROUP CODE

This section allows operator to define a group of cards as a Group.

The normally called 'Card Number' is in fact a serial number. All cards have a unique card serial number. This feature enables, for example, all cards of the kind 000183XXXXXXXX (i.e. all cards with the prefix 000183) to be defined as belonging to the same Group. An employee holding a card whose number is 00018325498661 will be part of that Group, and can then have access to options that are allowed only to that Group's members.

Table 4-11: Group code

TAG	DESCRIPTION
<i>Group Code</i>	In the Group code free text box, type the prefix of the cards that will become the new Group.
<i>Clear button</i>	This button clears the contents of the Group Code free text box.


CLOCK ID

This Tab also holds the **Clock ID** (the time clock's ID number) setting option.

Table 4-12: Clock ID

TAG	DESCRIPTION
<i>Clock ID</i>	Simply type a four-digit number in the free text box, and click the Set Clock button.
<i>Clear button</i>	This button clears the contents of the Clock ID free text box.

Table 4-13: Connection Password

TAG	DESCRIPTION
<i>Connection Password</i>	<p>Type a password and then click the Set Clock button. The password is saved in the clock record and from now and on, trying to modify the clock parameters will require entering a password. The following dialog box will appear.</p>  <p>This password is case sensitive and should comprise 4 digits/characters.</p>
<i>Save on PC</i>	<p>Select this option to bypass the password dialog procedure. When this option is selected, and the change saved in the system, you will not be required to type your password for modifying the clock settings.</p>

4.4. DATA TRANSFER

This tab contains all data transfer controls that allow uploading (from the host PC to the time clock) and downloading (from the time clock to the host PC) data files, as well as software updates. It also allows resetting of data files, as described in the following tables.

To Perform the data transfer action click the Download button in the bottom right corner of the tab.

4.4.1. Transfer Options section

This section contains the five following data transfer options:

- **Download Transactions**
- **Upload Ring Table**
- **Upload Data Files**
- **Update System Files**
- **Upload Print Labels**

They are described in the following paragraphs.

All actual data transferring is done after clicking the **Download** or **Update** button in the bottom right corner of the window.

DOWNLOAD TRANSACTIONS

This option enables operator to download transactions (old and new) into the host PC. As explained in Paragraph 2.1, there are two possible modes for downloading transactions. The *Download Transaction* application mode is the basic mode, which allows downloading only new transactions. The *Configuration Clock* mode is the full-featured application mode, which allows downloading **historical** transactions, as well as new ones.

The Data Transfer tab displayed in Figure 4-6 is part of the **Configuration Clock** mode. Selecting the **Download Transactions** radio button displays the following screen:

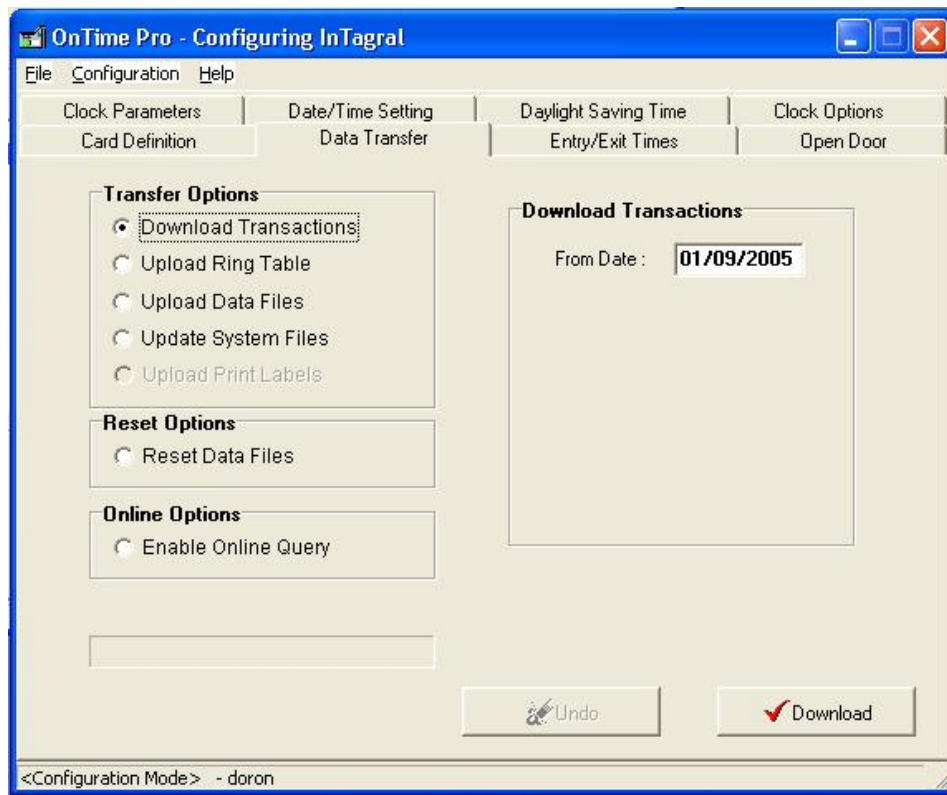


Figure 4-6: Data Transfer Tab – Download Transactions

Table 4-14: Download Transactions

TAG	DESCRIPTION
<i>From Date</i>	The date in the past from which to download the accumulated Entry/Exit transactions. All transactions from before the specified date will not be downloaded.

UPLOAD RING TABLE

The InTagral time clocks provide the option of controlling an electric bell/buzzer by sending timed electrical signals. These timed signals can be set by the operator, through the Ring Table that is described in the following.

Operator can define up to 19 different ring times.

Selecting the **Ring Table** radio button displays the following screen:

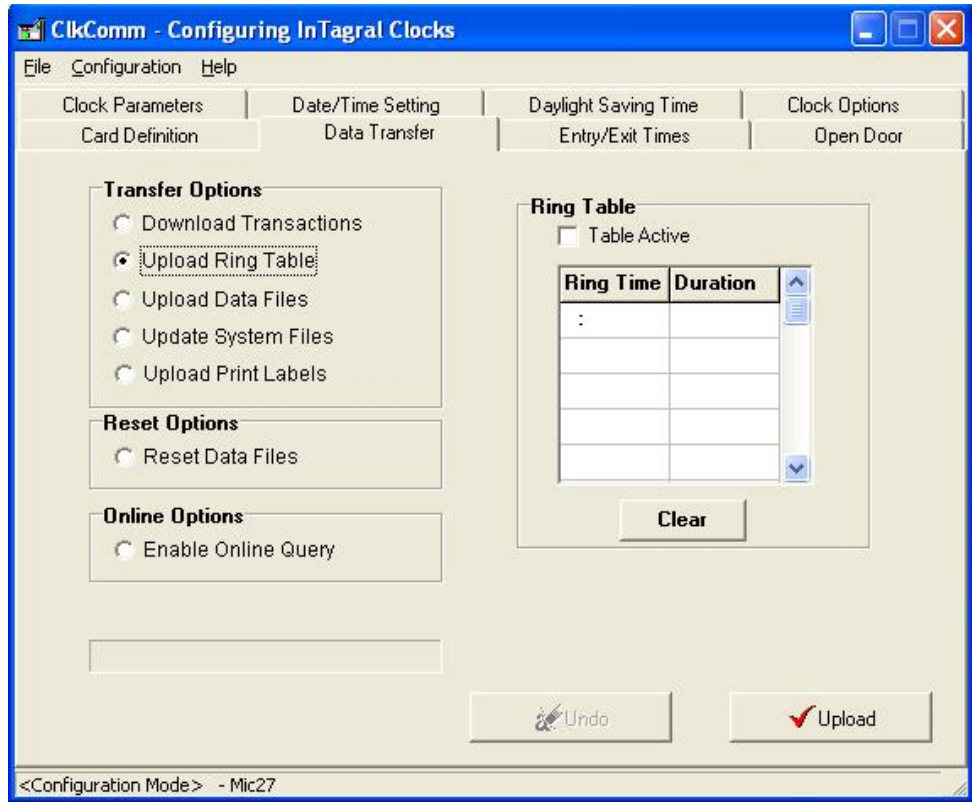


Figure 4-7: Data Transfer Tab – Ring Table

Table 4-15: Ring Table

TAG	DESCRIPTION
<i>Table Active</i>	Enables the ring table.
<i>Ring Time</i>	The time in which to send a control signal to the attached bell.
<i>Duration</i>	The duration of the ring (sec).

UPLOAD DATA FILES

This option enables operator to upload relevant data files into the clock from the host PC. The types of files available for upload are described below.

Selecting the **Upload Data Files** radio button displays the following screen:

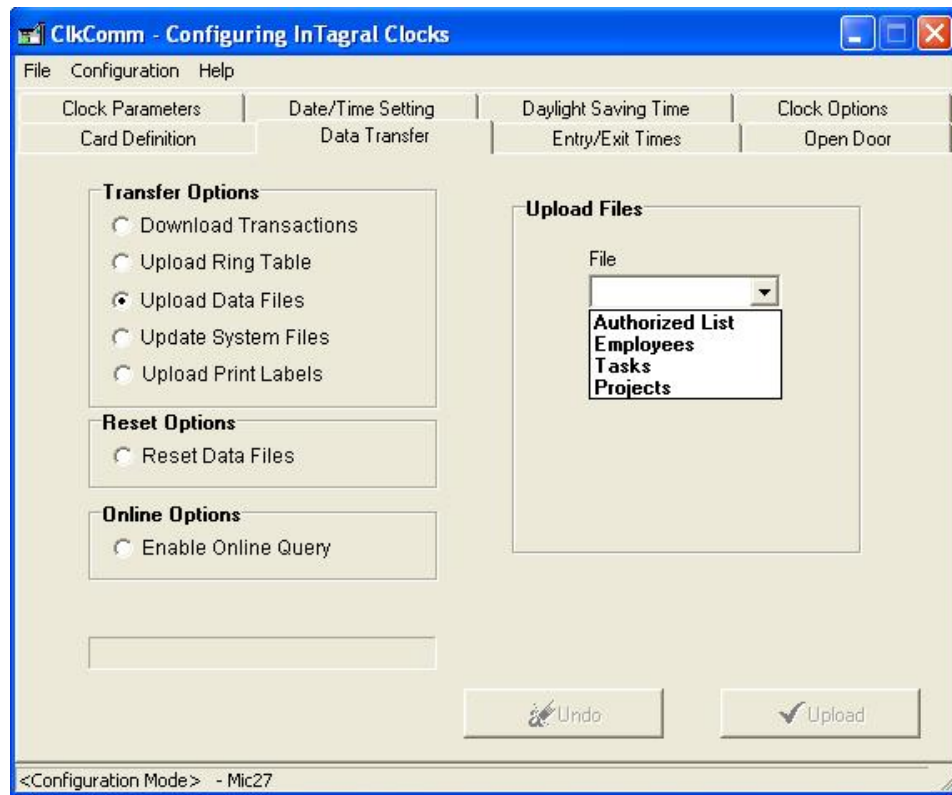


Figure 4-8: Data Transfer Tab – Upload Data Files

Table 4-16: Upload Files

TAG	DESCRIPTION
<i>File</i>	<p>Allows selecting the type of data file to be uploaded. The types are as follows:</p> <ul style="list-style-type: none"> • Authorized List – The data of all employees that are on the authorized list. • Employees – the data of all employees in the organization. • Tasks – the defined Tasks data • Projects – the different projects data. The projects are generated through the time & attendance application (e.g. Micronet's OnTime Pro).

UPDATE SYSTEM FILES

This option enables operator to update clock properties by uploading files and by performing software upgrading from the host PC. Selecting the **Update System Files** radio button displays the following screen:

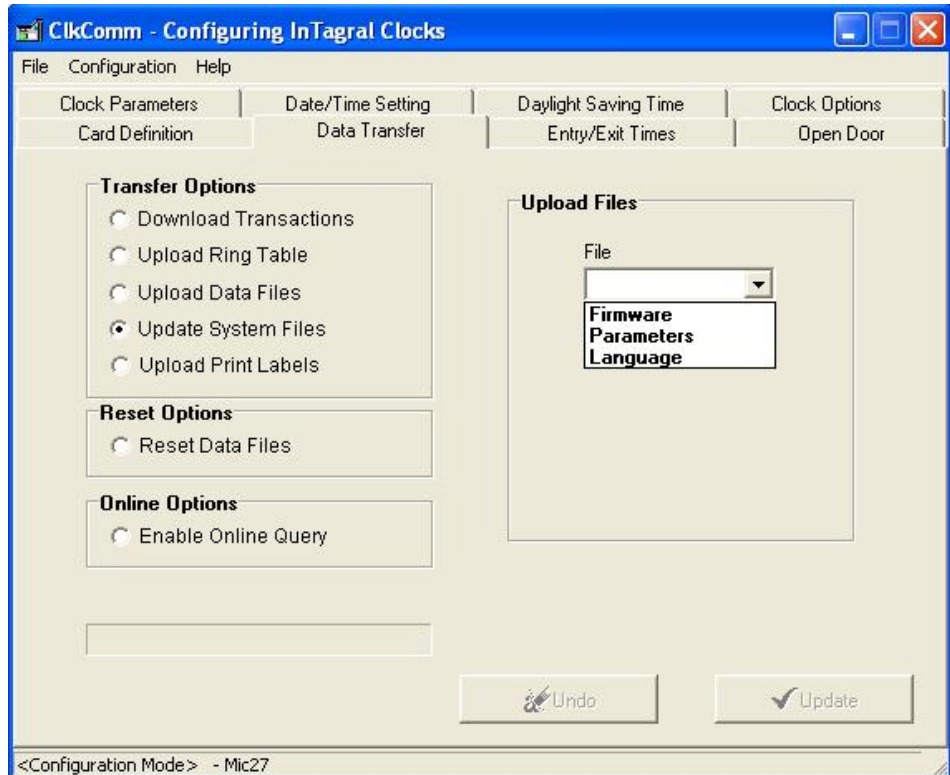


Figure 4-9: Data Transfer Tab – Update System Files

Table 4-17: Update Files

TAG	DESCRIPTION
<i>Firmware</i>	Update the clocks Firmware.
<i>Parameters</i>	Use the general parameters (options), as currently set by the operator.
<i>Language</i>	Updates the clock interface language according to the existing language file.

UPLOAD PRINT LABELS

This option is relevant only using the time clock for controlling a printer to print labels, according to a pre-defined task.

4.4.2. Reset Options

This option enables operator to delete the contents of the following data files:

- **Authorized List**
- **Employees**
- **Tasks**
- **Transactions**
- **Projects**

Selecting the **Reset Data Files** radio button displays the following screen:

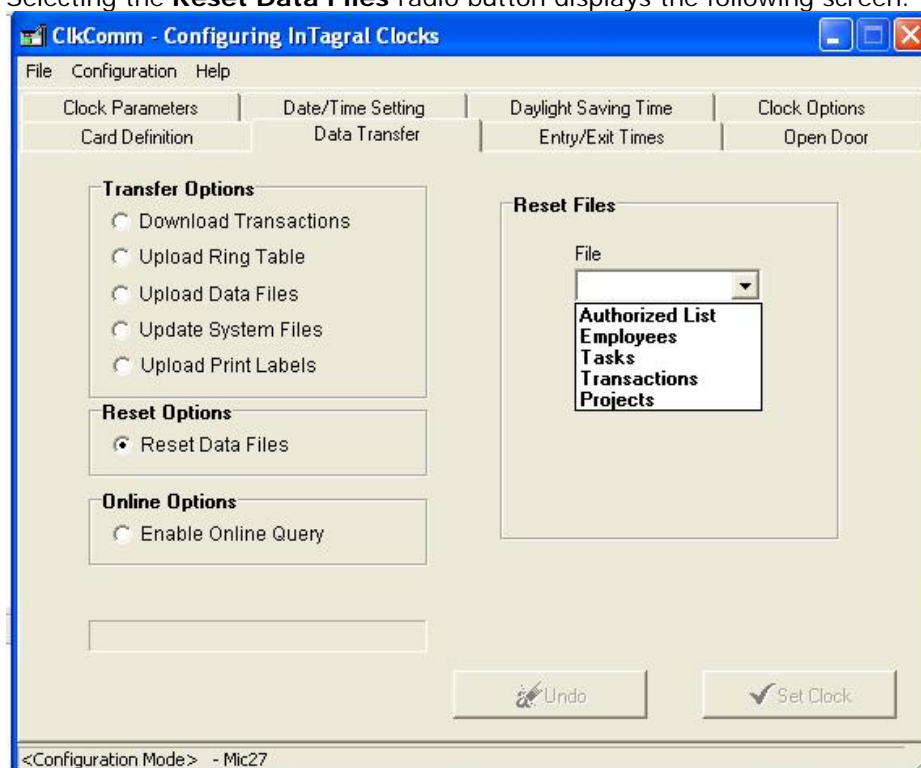


Figure 4-10: Data Transfer Tab – Reset Data Files

To reset a file, simply select it from the drop down list, and click the **Set Clock** button in the bottom right corner of the window.

NOTE

*When trying to reset the Transactions file, ClockComm displays a request to first download all transactions before resetting. Operator **cannot** reset this file until all transaction data is downloaded. This feature is crucial for the safekeeping of time and attendance data.*

4.4.3. Online Options

This option allows operator to initiate an online query that will be triggered according to operator needs. For example, when an employee uses their card on their lunch break, operator can use the online query option to check immediately if the employee has authorization to order a meal or not. Thus, only if authorization is granted, the clock will send an order to print the appropriate meal-ordering label.

Selecting the **Enable Online Query** radio button displays the following screen:

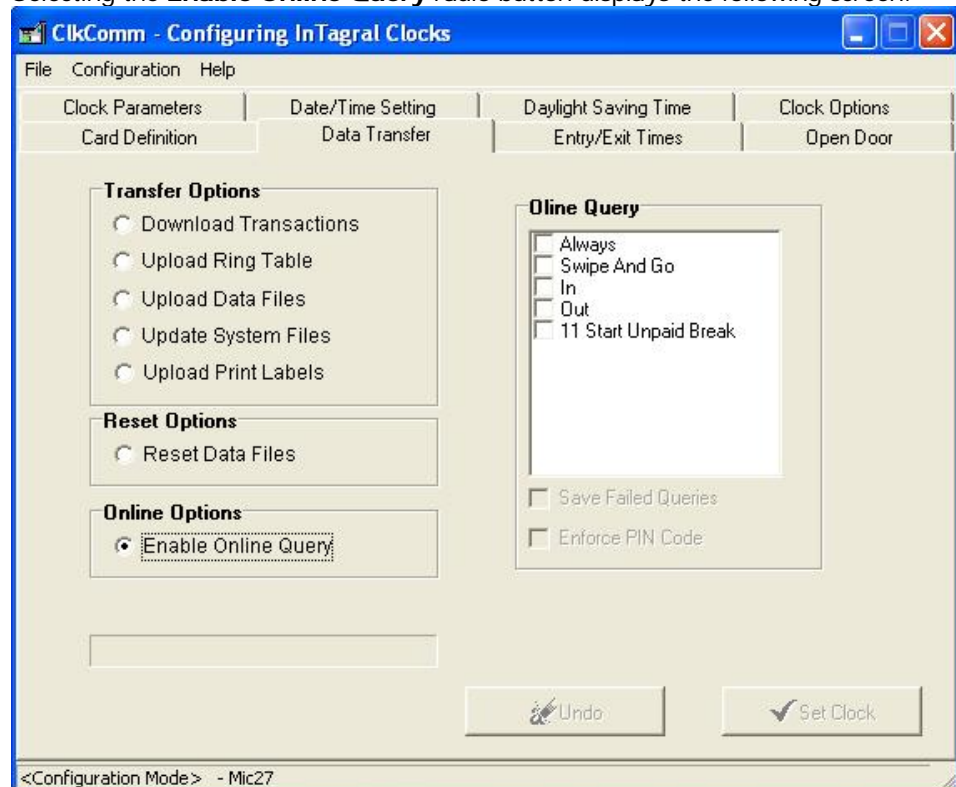


Figure 4-11: Data Transfer Tab – Enable Online Query

The **Online Query** section allows selecting the modes in which online querying is possible (for example, checking **In** and **11 Start Unpaid Break** will enable online querying when the clock is in IN mode, or in the task mode called Start Unpaid Break).

4.5. ENTRY/EXIT TIMES

This tab enables operator to define three different sets of operating instructions for the InTagral time clocks.

The main set of instructions is called **All Days**. This set of instructions specifies the clock's normal behavior in regular workdays.

There is an option to define two other sets of operating instructions. These sets are called **First Special Day** and **Second Special Day**. These special instructions can apply, for example, to a special day of the week (Friday for example), in which work hours are different than in other week days.

The interface helps operator to set and use these options with great ease, as described in the following.

NOTE:

All Days factory default is set to the following:
IN: Starts at 6.00
OUT: Starts at 12:59 (and turns to IN again at 6:00 the next day)

The following figure describes the Entry/Exit Times tab:

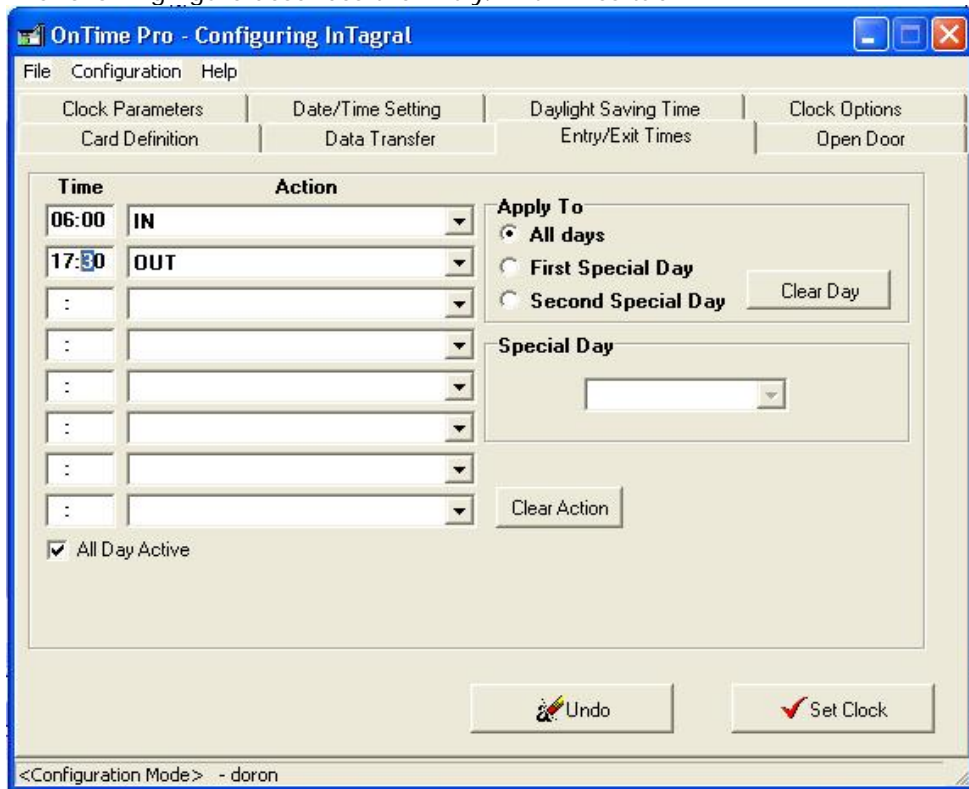


Figure 4-12: Entry/Exit Times Tab

Table 4-18: Entry/Exit Times Tab

TAG	DESCRIPTION
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Table 4-18: Entry/Exit Times Tab

TAG	DESCRIPTION
<i>Time</i>	<p>The start time of the mode of operation chosen in the corresponding Action dropdown list. For example, in Figure 4-12 above, at 6:00(am) the clock starts working in IN mode, remains in that mode until 17:30, in which it starts to work in OUT mode (stays in OUT until 6:00 the next day and so on).</p>
<i>Action</i>	<p>Selects the clock's mode of operation.</p> <p>Possible options are (see Figure 4-13):</p> <ul style="list-style-type: none"> • SWIPE & GO – in this mode, the clock registers the first swipe of a card as IN, and the next swipe of that same card as OUT, saving the employee the need to press the IN button on entry, and the OUT button before leaving. • IN – in this mode, the clock registers any swipe as an IN (Entry) transaction. It is still possible to report an OUT transaction by pressing the OUT button and quickly swiping employee card. The clock will remain in OUT position for a few seconds, and then go back to IN. • OUT - in this mode, the clock registers any swipe as an OUT (Exit) transaction. It is still possible to report an IN transaction by pressing the IN button and quickly swiping employee card. The clock will remain in IN position for a few seconds, and then go back to OUT. • SAVE MODE – in this mode, the clock remains in the last mode that was chosen by pressing the IN or the OUT button. • LOCKED – in this mode, the clock responds only to swiping a supervisor card (Master card) or entering supervisor code. • Project Mode – in this mode, only employees that belong to a specific project can register IN and OUT transactions. <p>The selected mode of operation will take effect when the clock reaches the time specified to the right of the dropdown list. For example, in the settings shown in Figure 4-12, the clock will start working in IN mode at 6:00.</p>
<i>All Days Active</i>	<p>This checkbox enables the All-Days set of operating instructions.</p>

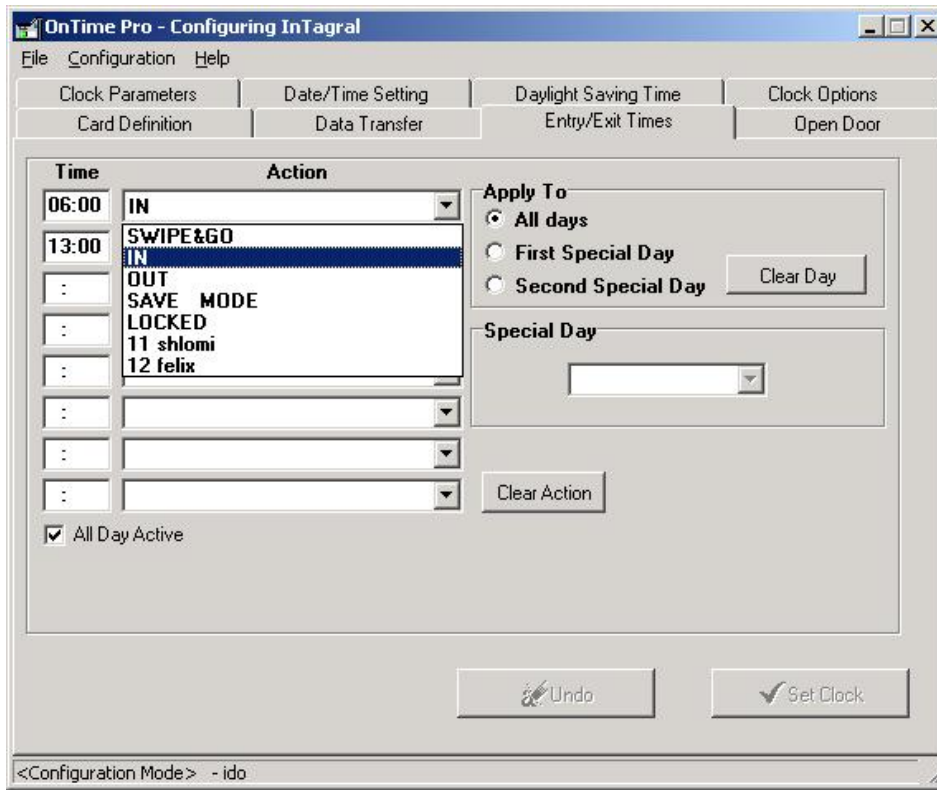


Figure 4-13: Entry/Exit Times Tab – Modes of Operation

Table 4-19: Entry/Exit Times Tab (continued)

TAG	DESCRIPTION
Apply To	<p>This section allows selecting between the three sets of operating instructions, as explained in paragraph 4.5 above.</p> <ul style="list-style-type: none"> • All Days – selects the main set of operating instructions, used for regular workdays. • First Special Day– selects the first set of special daily operating instructions. This is used for a workday different from the regular workday. • Second Special Day– selects the second set of special daily operating instructions. This is another option for a workday different from the regular workday.
Clear Day	Clears the Time and Action settings that belong to the selected set pf instructions (All-Days, 1 st or 2 nd Special Day)
Clear Action	Clears the highlighted Action settings

Table 4-19: Entry/Exit Times Tab (continued)

TAG	DESCRIPTION
<i>Special Day</i>	This dropdown list chooses the day of the week (Sunday through Saturday) that the selected special day applies to.

4.6. OPEN DOOR

This tab provides operator control of the clock’s electrical signaling, used for operating (unlocking) an electronically controlled door.

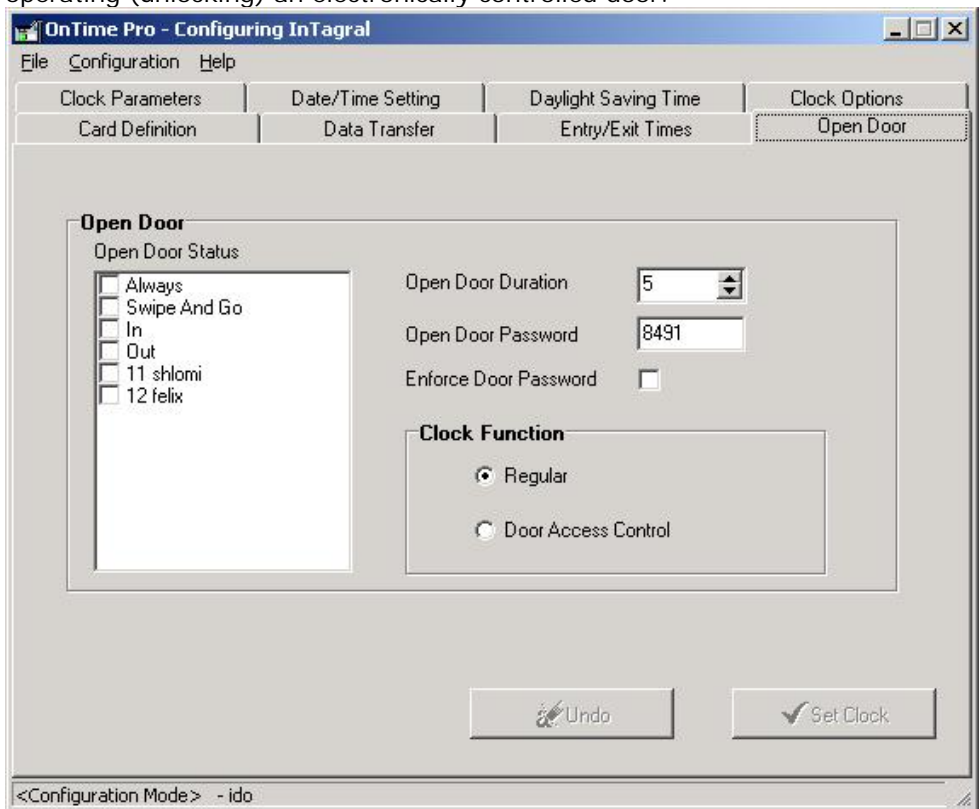


Figure 4-14: ClockComm Door Open settings Interface

Table 4-20: Door Open settings tab

TAG	DESCRIPTION
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Table 4-20: Door Open settings tab

TAG	DESCRIPTION
Open Door Status	<p>This section enables the clock to become an electronic door controller, according to the selected mode of operation. Operator can check one or more of the operating modes. Not checking any mode disables the clock's door control option. Possible options are:</p> <ul style="list-style-type: none"> • Always – always allow door control, for any clock operation mode • Swipe And Go - allow door control when clock is in Swipe And Go mode • In - allow door control when clock is in IN mode • Out - allow door control when clock is in OUT mode • 11 Production - allow door control when clock is in the project mode named '11 Production' • 12 Experiment - allow door control when clock is in the project mode named '12 Experiment' <p>For example, checking In, Out and 12 felix makes the clock operate as a door control only when it is set to IN mode, OUT mode, or the project mode named '12 felix'.</p>
Open Door Duration	Sets the number of seconds the door remains unlocked.
Open Door Password	Sets a four-digit password for unlocking the door. This password is required only when the Enforce Door Password (below) checkbox is checked.
Enforce Door Password	the door unlocks by entering the password together with swiping the card only. Password is set through the Open Door Password (above) parameter.
Clock Function	<p>The InTagral time clocks can operate as Time & Attendance data collectors, as well as simple electronic door controllers (in places where only this function is needed; for example, a passage door within the organization). Select one of the two options through the Clock Function section:</p> <ul style="list-style-type: none"> • Regular – the clock functions as a full-featured Time & Attendance data collector. • Door Access Control – the clock functions as an electronic door controller. In this mode, all entry and exit controls remain the same, but no data collection is done except when the employee manually performs an IN or OUT transaction (by pressing IN or OUT before swiping the card).

Chapter 5 PARAMETERS

This chapter describes the Parameters window. This window (see Figure 5-1) allows access to advanced clock parameter settings, as described in the following.

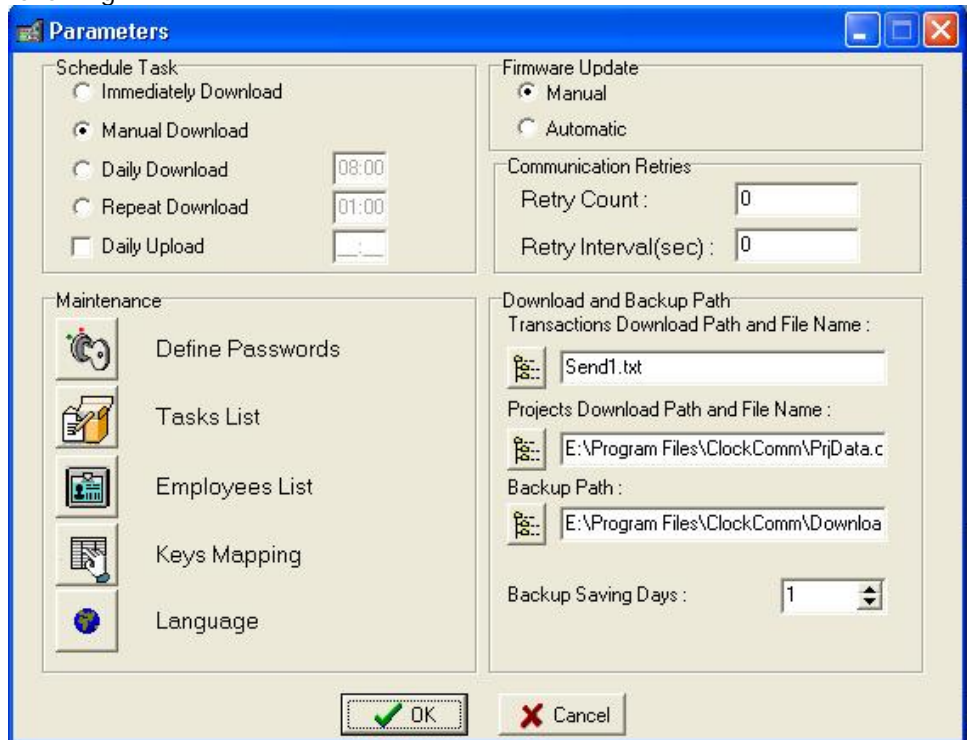


Figure 5-1: Parameters Window

SCHEDULE TASK

This section allows operator to set download and upload rules for everyday operation.

Table 5-1: Schedule task

TAG	DESCRIPTION
<i>Immediately Download</i>	The host PC downloads the Transactions and Projects data files automatically when ClockComm starts
<i>Manual Download</i>	Allows manual download control through the Data Transfer tab in the Configuration window (See Paragraph 0)
<i>Daily Download</i>	Allows automatic daily download. Operator must specify (in the corresponding text box to the right) the hour the download will take place.
<i>Repeat Download</i>	Allows automatic repeated downloads on an hourly basis. Operator must specify (in the corresponding text box to the right) the number of hours between downloads.
<i>Daily Upload</i>	Allows automatic daily upload of the clock's data files. Operator must specify (in the corresponding text box to the right) the hour the upload will take place.

MAINTENANCE

This section includes a number of advanced functions that make use of the InTagral clock, ClockComm, and OnTime Pro capabilities. Starting with creating password-guarded access to ClockComm, through creating clock Tasks, assigning Projects to the clock, and more.

Table 5-2: Maintenance

TAG	DESCRIPTION
<i>Define Password</i>	Allows operator to define a password for using ClockComm. A separate password can be created for All Employees, and for Authorized Employees.
<i>Tasks List</i>	Allows operator to create, edit, and delete clock tasks.
<i>Employee List</i>	Allows operator to add, delete, and edit employee records
<i>Key Mapping</i>	Allows operator to create shortcut keys to clock functions using the clock's keypad. Shortcuts can be created to selected functions, such as In/Out List, Task/Project List, Options Screen and 'who is in' (that prints the list of current employees in the premises) etc.

Table 5-2: Maintenance

TAG	DESCRIPTION
<i>Language</i>	Allows access to the clock interface language settings

FIRMWARE UPDATE

This section allows operator selecting between manual and automatic control over the clock's firmware updating.

Table 5-3: Firmware Update

TAG	DESCRIPTION
<i>Manual</i>	Allows manual update of the clock's firmware through the Data Transfer tab in the Configuration window (See Paragraph 0)
<i>Automatic</i>	ClockComm automatically checks the clock's firmware version, and updates it automatically when newer version exists

COMMUNICATION RETRIES

This section allows operator to set the number of communication retries in case ClockComm failed to connect to the time clock.

Table 5-4: Communication Retries

TAG	DESCRIPTION
<i>Retry Count</i>	Sets the number of communication retries before quitting communication attempts
<i>Retry Interval (sec)</i>	Sets the time interval (in seconds) between communication retries

DOWNLOAD AND BACKUP PATH

This section defines the paths and filenames of the clock's data files. It also sets the interval (in days) between automatic data backups.

Table 5-5: Download and Backup Path

TAG	DESCRIPTION
<i>Transactions Download Path And Filename</i>	The path and name of the Transactions data file
<i>Projects Download Path And Filename</i>	The path and name of the Projects data file

Table 5-5: Download and Backup Path

TAG	DESCRIPTION
<i>Backup Path</i>	The path of the backup files
<i>Backup Saving Days</i>	Sets the number of days to keep all backup history. All backup files older than the specified number of days will be deleted.

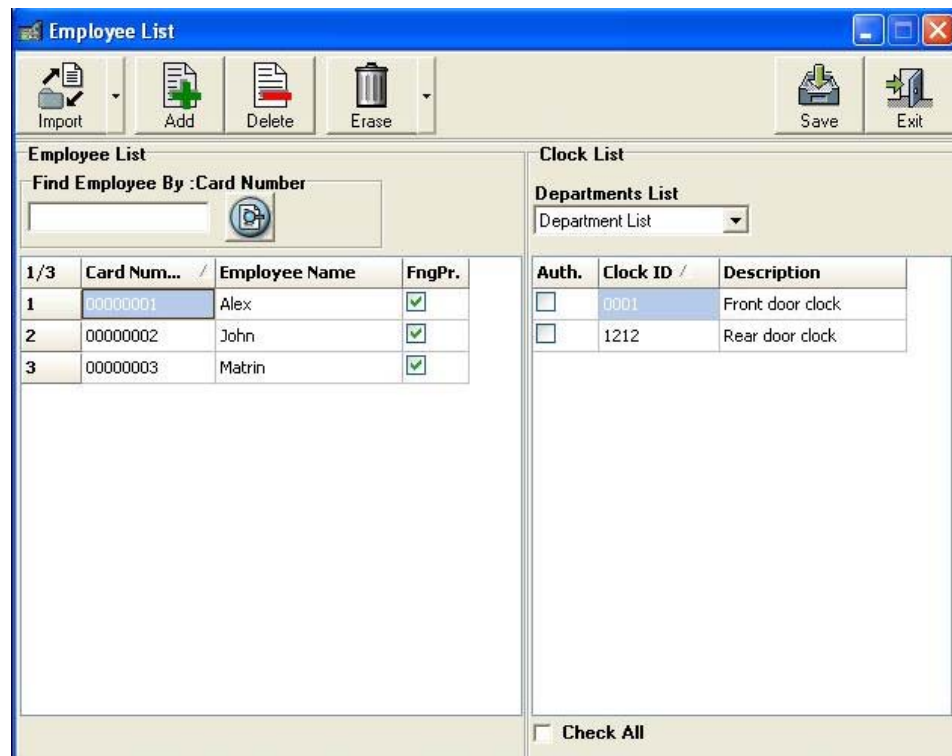
5.1. ASSOCIATING EMPLOYEE LISTS WITH CLOCKS

By default, all the employees are associated to all the clocks.

However, ClockComm gives you the possibility to restrict the reporting of specific employees to specific clocks only. An employee whose reporting has been restricted to one or more specific clock(s) will be able to report only to the designated ones.

To associate an employee list with a specific clock

- 1 In the **Parameters** screen, click the **Employee List** option.
The Employee List window appears.




1/3	Card Num...	Employee Name	FngPr.
1	00000001	Alex	<input checked="" type="checkbox"/>
2	00000002	John	<input checked="" type="checkbox"/>
3	00000003	Matrin	<input checked="" type="checkbox"/>

Auth.	Clock ID /	Description
<input type="checkbox"/>	0001	Front door clock
<input type="checkbox"/>	1212	Rear door clock


Check All

- 2 In the left pane, select the desired Employee.
For your convenience, the clocks have been distributed according to the Organization departments.
- 3 Select the appropriate **Department** to display the relevant clocks.
- 4 In the **Clock List** pane on the right, select the checkbox of the clock you wish to associate the employee with.
- 5 To enable the employee to report to all the clocks, select the **Check All** option at the bottom of the screen.
- 6 Select the FingerPrint checkbox of an employee to require his/her fingerprint identification anytime he/she uses the clock.
- 7 Click **Save** to save your changes.

To search for an employee by Card number

- 1 Click the **Card Number** column title. The function title becomes 'Search Employee by Card Number'.
- 2 In the Search box, type the exact card number and then click the Search  button. The desired employee record is highlighted.

To search for an employee by Employee name

- 1 Click the **Employee Name** column title. The function title becomes 'Search Employee by Employee Name'.
- 2 In the Search box, type the employee name or part of it, and then click the Search  button. The desired employee record is detected and appears highlighted.

5.2. IMPORTING EMPLOYEE DATA FROM FILE

You can import employee related information including user name, and badge number from an external CSV file.

This can be done through the Employee List screen toolbar.



- 1 On the **Employee List** toolbar, click **Import**.
A browser appears, pointing to the default ClockComm application folder.
- 2 To get the CSV file from another location, browse to the location containing the desired CSV file. Once you import it from there, ClockComm will memorize the location and make it the default one.

5.2.1. Employee data CSV file rules

The file should consist of three fields:

1. Badge Number
2. Employee First name
3. Employee Second Name

Every row should have at least one line and two commas, otherwise the message 'Wrong file structure' may appear.

The Import button displays two options: **Update** and **Overwrite**.

Update means that if the badge number exists in the current list ,only the employee name will be updated. If it does not exist, the employee will be added. On the other hand, If the employee doesn't exists in the new list, it will not be deleted.

Overwrite means that the current employee list will be deleted and entirely replaced by the new one. Should be also noted that the lock authorization links will be deleted as well.

If the Badge number is longer then specified in the "UserBadgeLen" parameter, the line will be truncated and added to the log file.

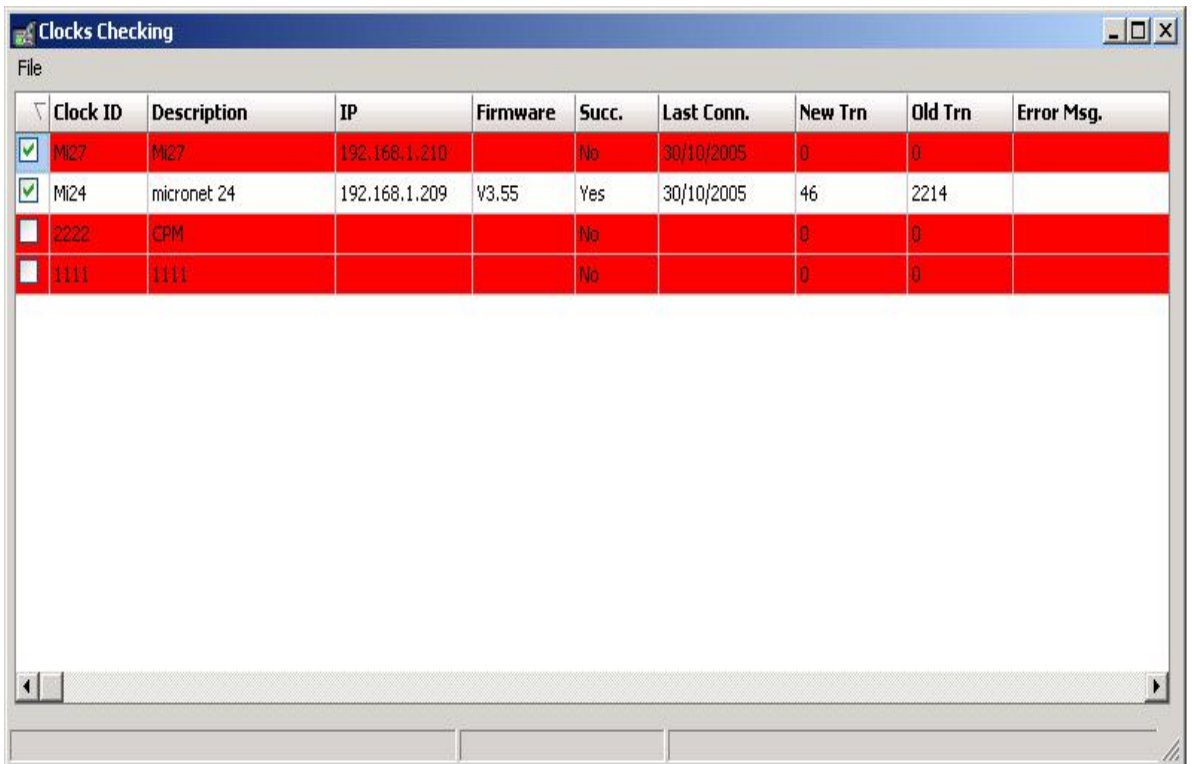
Chapter 6

CLOCK CHECKING

The ClockComm application allows monitoring the status of all the defined time clocks.

To view the clocks monitor window (named **Clocks Checking**) in the ClockComm main window toolbar go to **Clocks→View**.

The Clocks Checking window is displayed:



The screenshot shows a window titled "Clocks Checking" with a menu bar containing "File". Below the menu bar is a table with the following columns: Clock ID, Description, IP, Firmware, Succ., Last Conn., New Trn, Old Trn, and Error Msg. The table contains four rows. The first row (MI27) is highlighted in red. The second row (MI24) is white. The third row (2222) is highlighted in red. The fourth row (1111) is highlighted in red. The table is scrollable, as indicated by the scrollbar at the bottom.



<input type="checkbox"/>	Clock ID	Description	IP	Firmware	Succ.	Last Conn.	New Trn	Old Trn	Error Msg.
<input checked="" type="checkbox"/>	MI27	MI27	192.168.1.210		No	30/10/2005	0	0	
<input checked="" type="checkbox"/>	MI24	micronet 24	192.168.1.209	V3.55	Yes	30/10/2005	46	2214	
<input type="checkbox"/>	2222	CPM			No		0	0	
<input type="checkbox"/>	1111	1111			No		0	0	

Figure 6-1: Clocks Checking Window

A list of all defined time clocks appears in a table. Each row represents a single clock. A row highlighted in Red indicates no communication with that clock currently exists.

For each clock, the Clocks Checking table displays a number of parameters statuses. The following tables **Error! Reference source not found.** describe each of the columns of the Clocks Checking table.

Table 6-1: Clocks Checking Table

COLUMN	DESCRIPTION
 (<i>Checkbox column</i>)	This column marks clocks the operator chooses to form communication with. Check all required clocks under the  icon to mark them. For performing clock communication, see Paragraph Error! Reference source not found.
<i>Clock ID</i>	This clock's ID number.
<i>Description</i>	This clock's name.
<i>IP</i>	This clock's IP address.
<i>Firmware</i>	Displays this clock's Firmware version.
<i>Last Comm</i>	Displays the date of last connection made with this clock.
<i>New trn</i>	Displays the number of this clock's new transactions made since the last download.
<i>Old trn</i>	Displays the number of all transactions registered by this clock
<i>Error Msg.</i>	Displays error messages related to communication problems.

6.1. FORMING CLOCK COMMUNICATION

To form clock communication do the following:

1. Check the checkboxes of all clocks to communicate with.
2. In the menu toolbar go to **File→Check**.

ClockComm tries to communicate with all the selected clocks, and updates all their monitored parameters.

If the communication with a clock fails, the relevant row is highlighted in Red, and the word 'No' appears under the '**Succ.**' column. When a communication fails, an appropriate message appears under the '**Error Msg.**' column.

When communication succeeds, the word 'Yes' appears under column '**Succ.**'

Chapter 7

TROUBLESHOOTING

7.1. COMMUNICATION PROBLEMS

If communications between InTagral and the PC fails, the following error message appears on the "Connections and Configuration" screen: "Attention: Unable to communicate with the clock". The most common cause of communications glitches is a loose connection. Check both connection points on the cable that hooks up the InTagral to the PC or modem. If this remedy fails - check the definitions in the "Configuring InTagral" window of the Setup function. For more information on Setup, Configurations and clock definitions - see Chapter 4.

Appendix A.

FINGERPRINT SERVER APPLICATION

When installing ClockComm, the Fingerprint Server application is added to the ClockComm folder.

The Fingerprint Server application allows great operational flexibility.

By using a single PC, located somewhere within the organization, the person in charge can have complete access and management abilities of the fingerprint data on each and every time clock in the organization.


The application allows acquiring new fingerprint scans, and adding them to existing employee records, Importing and Exporting fingerprint data from and to each of the organization's time clocks, and deleting fingerprint data; all with no need of performing a single operation on any clock itself.

The Fingerprint Server application performs all operations on fingerprint data files that exist on the PC. Actual communication with each clock, for receiving and transmitting the fingerprint data files is done by the ClockComm application.

The Fingerprint Server application enables:

- Keeping all fingerprint information on a single computer
- Assigning new fingerprints to employees
- Deleting fingerprint data
- Importing clock fingerprint data from each clock separately
- Exporting fingerprint data to each clock separately

To access the Fingerprint Server Application go to

Start → **Programs** → **ClockComm** , and select  **Fingerprint Server**.

The main window is displayed:

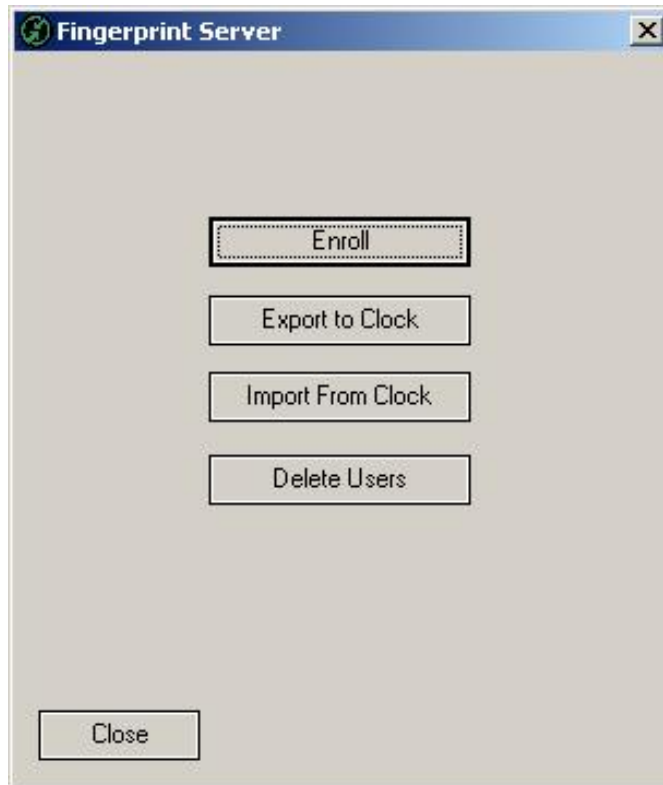


Figure A-1: Fingerprint Server Main Window

Possible options are:

- **Enroll** –This function adds new fingerprint scans and attaches them to existing employee records (requires purchasing a USB fingerprint scanner (SFR-2000). For purchasing information, please contact your local Micronet distributor.).
- **Export to Clock** – allows operator to export fingerprint-reinforced employee data to a specific time clock. This function adds fingerprint data to selected employees. The actual exporting (updating of the time clock) is done by the ClockComm application
- **Import From Clock** – allows operator to load fingerprint-reinforced employee data from a specific time clock into the PC. The actual reading from the time clock is done by the ClockComm application.
- **Delete Fingerprints** – This function allows deleting fingerprint data for selected employees.

A.1 ENROLL

Adding fingerprint scans is possible for employees that are listed on the PC.

Specify the employee to add a fingerprint scan in one of two ways:

- Type in the employee's full card number (see Figure A-2)
- Select employee from drop down list (see Figure A-3)

The screenshot shows a software window titled "Enroll Employee's Fingerprint". The window contains the following elements:

- Text: "Please Specify Employee to Enroll"
- Text input field: "Card Number" with the value "00000001"
- Dropdown menu: "Select Employee" with "Beverley Gill" selected
- Section: "Enrollment" containing:
 - Button: "Enroll Now"
 - Checked checkbox: "Capture Twice"
 - Button: "Verify Last"
- Button: "Exit" (highlighted with a dashed border)

Figure A-2: Fingerprint Server Enroll Window – Enroll By Typing Card Number

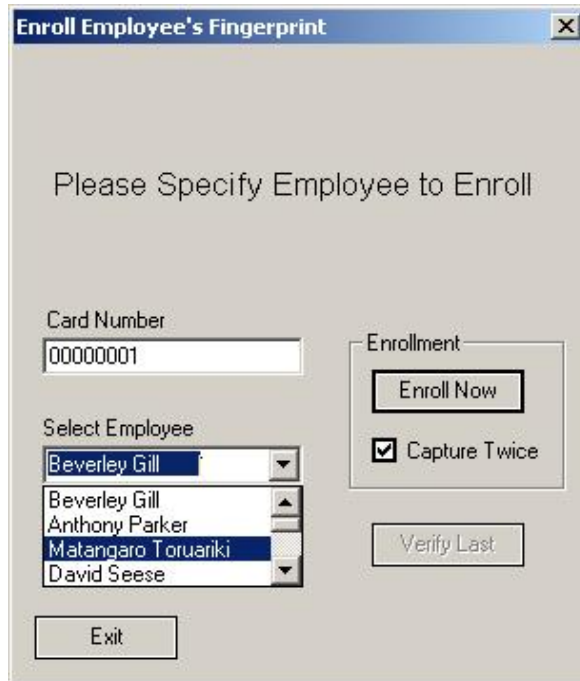


Figure A-3: Fingerprint Server Enroll Window – Select Employee

A.2 ENROLLMENT PROCESS

After specifying employee, click the **Enroll Now** button.

NOTE

The **Capture Twice** checkbox enables double capture of a fingerprint during the enrollment process. This enables acquiring better fingerprint data quality.

The **Capture Twice** checkbox is checked by default.

The Fingerprint Server application asks to place a finger on the scanning surface of the USB fingerprint scanner (see Figure A-4).



Figure A-4: Fingerprint Server Enroll Process– Place Finger

After success in acquiring a first fingerprint scan, the application notifies employee to remove finger from the fingerprint scanner (see Figure A-5)



The screenshot shows a software window titled "Enroll Employee's Fingerprint" with a close button in the top right corner. The main heading in the center is "Remove Finger". Below this, there are several input fields and buttons:

- Card Number:** A text box containing "00000005".
- Select Employee:** A dropdown menu with "Gardenia Ettles" selected.
- Enrollment:** A section containing:
 - An "Enroll Now" button with a dotted border.
 - A checked checkbox labeled "Capture Twice".
- A "Verify Last" button.
- An "Exit" button at the bottom left.

Figure A-5: Fingerprint Server Enroll Process– Remove Finger

Employee must now remove finger from fingerprint scanner.

If **Capture Twice** is enabled, immediately after employee removes finger, the application asks to place finger again (see Figure A-6). Employee must now **place the same finger as placed in the first scan** mentioned above on the scanning surface of the fingerprint scanner.



Figure A-6: Fingerprint Server Enroll Process– Place Finger Again

If both scans were received successfully, the following window appears (see Figure A-7), indicating enrollment success:

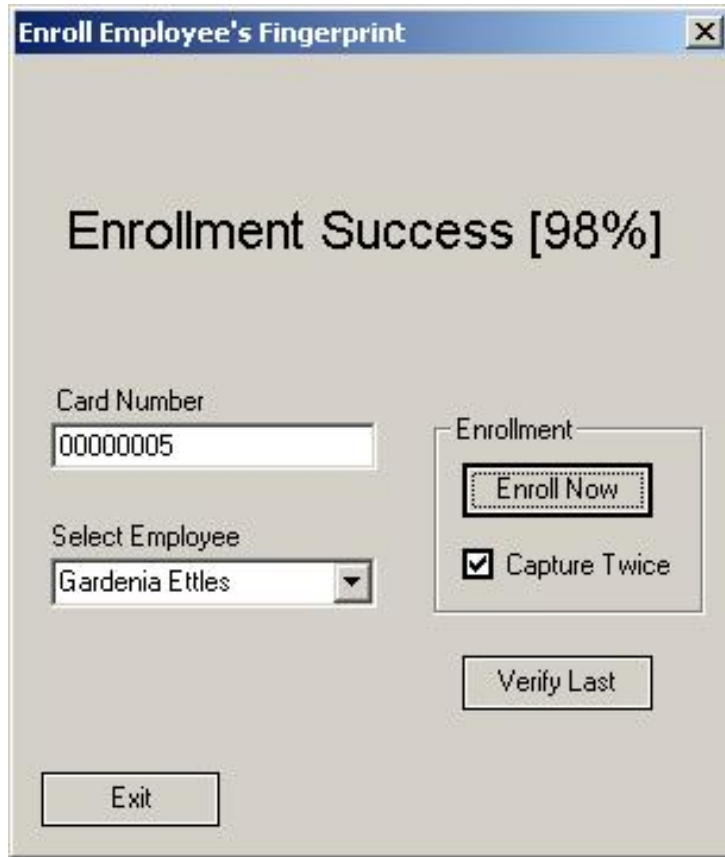


Figure A-7: Fingerprint Server Enroll Process– Enrollment Success

The numerical value (in percentages) indicates the quality of the received fingerprint data. Keeping bad quality data might cause difficulty in later recognition and identification of the employee by their fingerprint. The application therefore allows operator to discard bad quality fingerprint data. If data quality is below 80%, the following message appears:

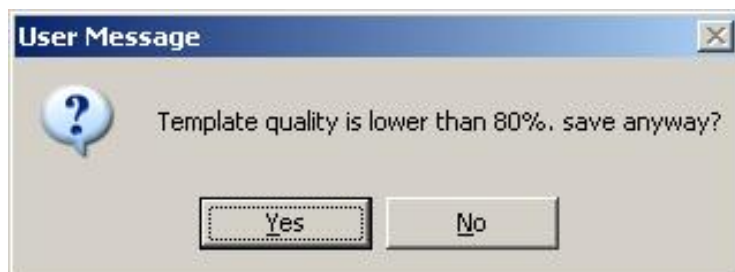


Figure A-8: Fingerprint Server Enroll Process– Low Quality Message

Click **Yes** to save fingerprint data, or **No** to discard.

If **No** is selected, data is discarded, and operator must repeat the fingerprint enrollment, beginning from Paragraph A.2.

If finger is not placed properly on the scanning surface, the application displays a **Capture Fail** message (see Figure A-9).

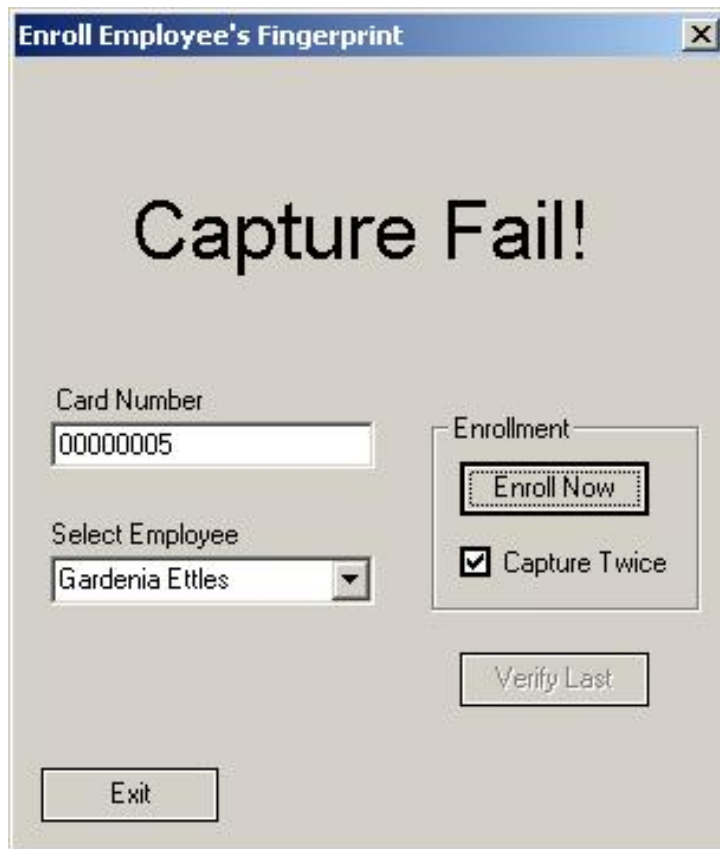


Figure A-9: Fingerprint Server Enroll Process– Capture Fail

In a case of capture failure, operator must repeat the enrollment process, beginning from Paragraph A.2.

A.2.1 FINGERPRINT MISMATCH

In case an employee places, in the second scan, a different finger from the one they placed in the first scan, the application announces **Fingerprint Mismatch** (see Figure A-10).

NOTE

Fingerprint Mismatch can occur only when the *Capture Twice* checkbox is checked.



Figure A-10: Fingerprint Server Enroll Process– Fingerprint Mismatch

In a case of fingerprint mismatch, operator must repeat the enrollment process, beginning from Paragraph A.2.

A.3 CAPTURE VERIFICATION

The Fingerprint Server application enables operator to check the system's ability to identify an employee using the newly acquired fingerprint scan.

NOTE

*Verifying fingerprint identification ability can be done only for the **last employee that was enrolled.***

To check fingerprint identification of the last enrolled employee:

- 1 Click **Verify Last** (see Figure A-11)

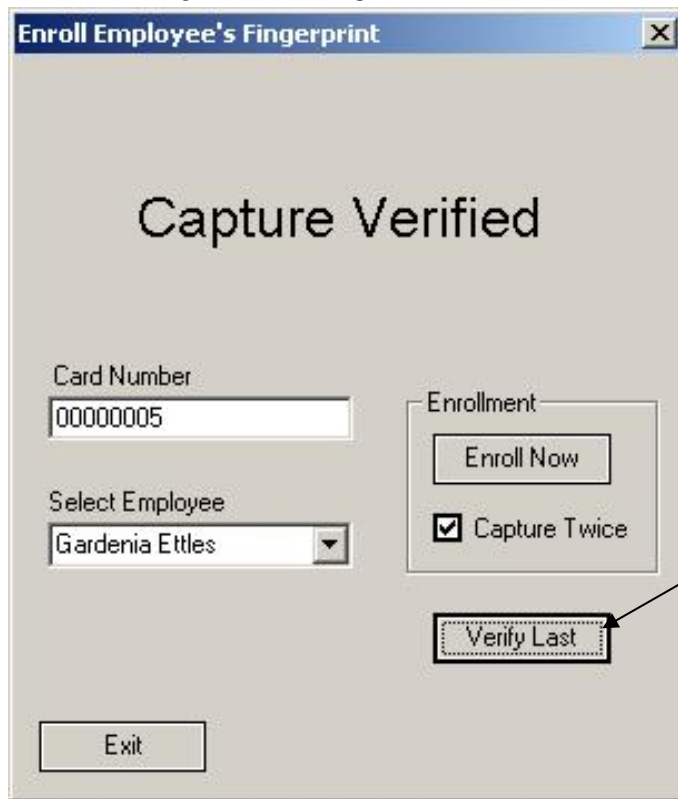


Figure A-11: Fingerprint Server Enrollment Verification

- 2 Employee is now requested to place finger on the scanning surface of the USB fingerprint scanner (see Figure A-13). Employee must place the same finger as the one used in the last enrollment process.



Figure A-12: Fingerprint Server Enrollment Verification – Place Finger

A few seconds after placing finger on the scanning surface, the system displays either a **Capture Verified** message, in case identification was successful (see Figure A-13), or a **Verification Failed** message, if identification was not possible (see Figure A-14).

If verification failure occurs, repeat the **Verify Last** process once or twice, until success. If verification still can not be reached, repeat the enrollment process, beginning from Paragraph A.2.

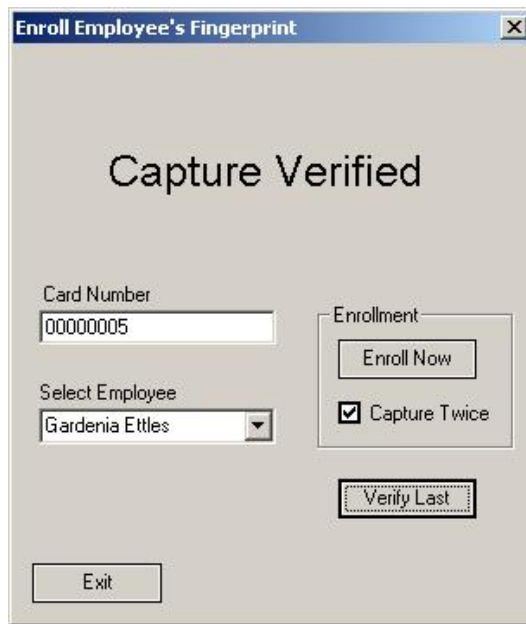


Figure A-13: Fingerprint Server Enrollment Verification – Capture Verified

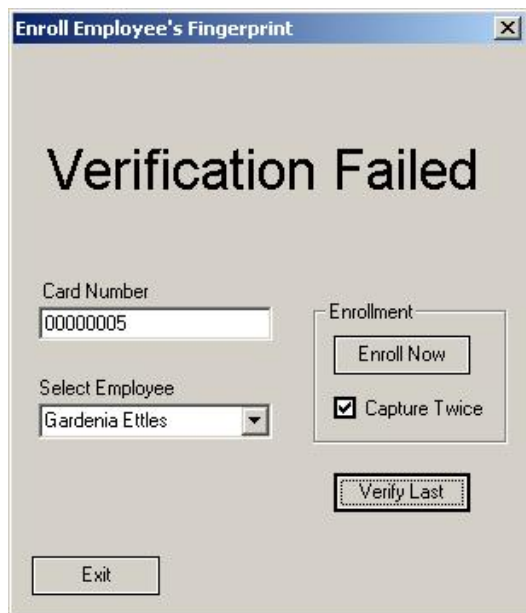


Figure A-14: Fingerprint Server Enrollment Verification – Verification Failed

After successful enrollment (and capture verification), operator can either select another employee to add fingerprint data to, or click **Exit** to end the enrollment process, and return to the Fingerprint Server main window.

A.4 EXPORT TO CLOCK

The Fingerprint Server application enables exporting fingerprint data to clocks. This is useful, for example, for adding new fingerprint data that was acquired by the Fingerprint Server to a specific time clock without needing to attend to the clock itself.

Clicking **Export to Clock** in the main Fingerprint Server window displays the following window (Figure A-15):

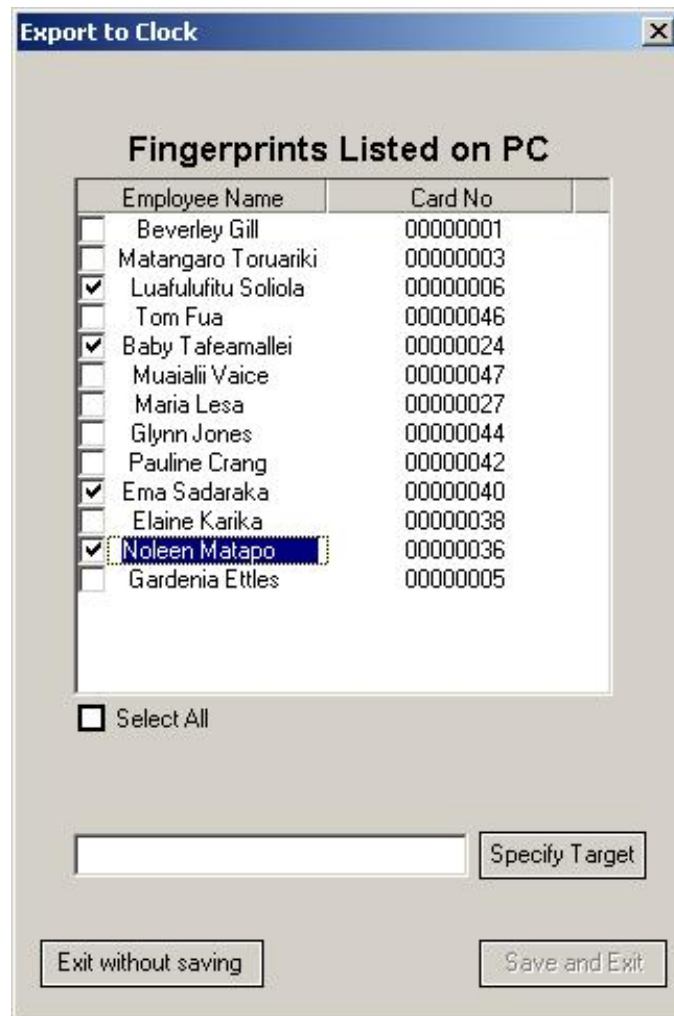


Figure A-15: Fingerprint Server - Export to Clock

The window displays a list of all employees listed on the local PC that have recorded fingerprint data.

To export some or all fingerprint data to a file:

- 1 Check one or more employees that appear on the list (checking **Select All** checkbox selects all employees)
- 2 Click the Specify Target button. The Specify Target window appears (Figure A-16):

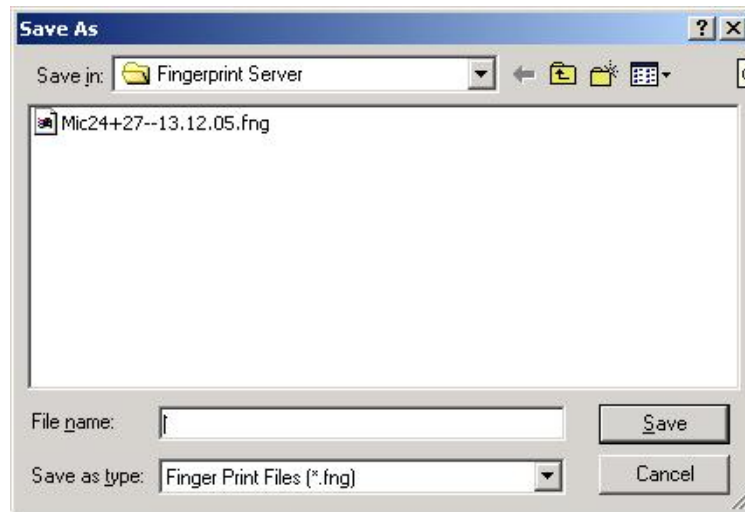


Figure A-16: Fingerprint Server – Export to Clock – Specify Target

- 3 Specify the target and name of the fingerprint data file (.fng file) to be created.

NOTE

Make sure to remember the target directory of the exported .fng file; this directory is needed for later performing the actual exporting by the ClockComm application.

- 4 Click the **Save** button

- 5 Click the **Save and Exit** button (see Figure A-17) to save the .fng file.

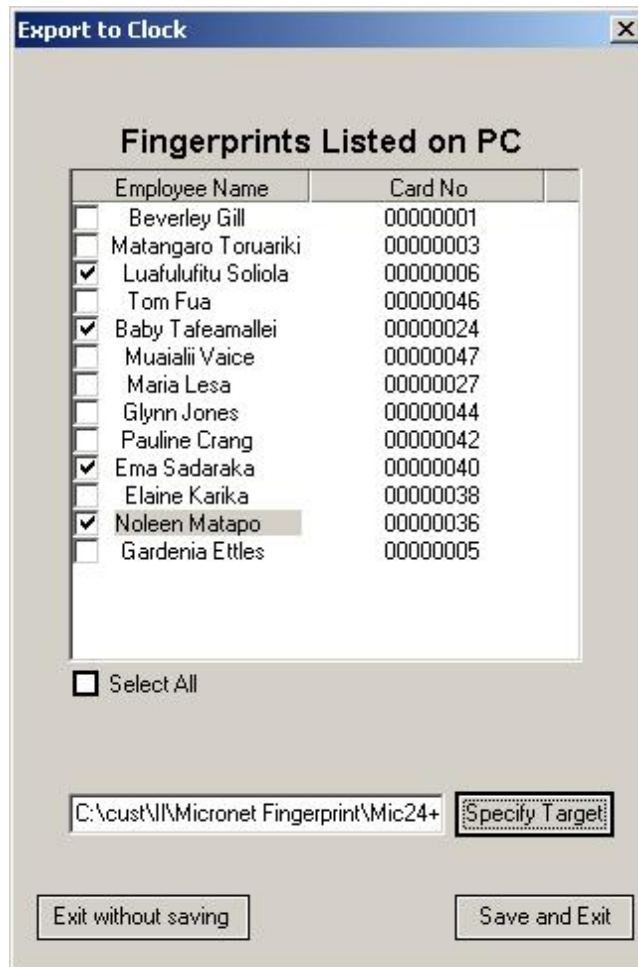


Figure A-17: Fingerprint Server – Export to Clock – Save and Exit

CAUTION

CLICKING **SAVE** (STAGE 4 ABOVE) DOES NOT PERFORM SAVING OF THE .FNG FILE. MAKE SURE TO CLICK **SAVE AND EXIT** IN ORDER TO PERFORM THE ACTUAL SAVING.

- 6 To discard changes and quit without saving click **Exit without saving**.

A.5 IMPORT FROM CLOCK

The Fingerprint Server application enables importing fingerprint data from clocks to the local PC. This is useful, for example, for keeping and managing all of the organization's fingerprint data on a single remote computer, with no need to perform direct actions on any of the clocks.

Clicking **Import From Clock** in the main Fingerprint Server window displays the following window (Figure A-18):

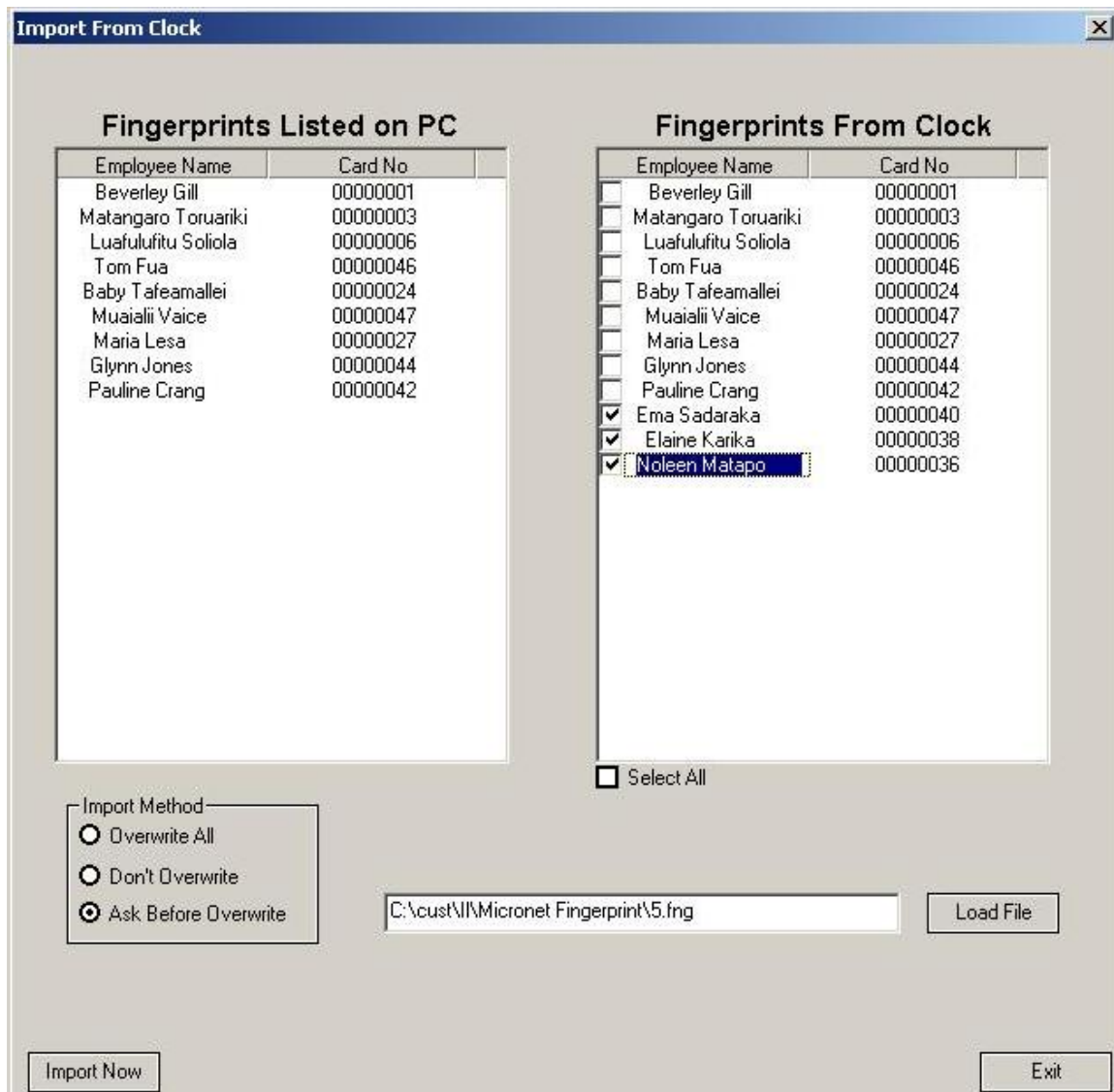


Figure A-18: Fingerprint Server – Import From Clock

The window displays two lists:

- **Fingerprints Listed on PC** - a list of all employees listed on the local PC that have recorded fingerprint data.
- **Fingerprints From Clock** - a list of employees with fingerprint data acquired from a specific time clock.

To import some or all fingerprint data to local PC:

- 1 Click the **Load File** button and select the relevant *.fng* file (the file that contains the required time clock's fingerprint data).
- 2 The list of employees with fingerprint data acquired from the time clock appears on the **Fingerprints From Clock** list window.
- 3 Check one or more employees that appear on the **Fingerprints From Clock** list (checking **Select All** checkbox selects all employees)
- 4 Click the **Import Now** button to add the selected fingerprint data to the fingerprint data already kept on the PC.
- 5 The employees whose fingerprint data was imported are now added to the **Fingerprints Listed on PC** list.

NOTES

- *The actual importing is done by clicking the **Import Now** button. Exiting before clicking **Import Now** discards all changes and exits the **Import From Clock** window.*
- *There are three import methods: **Overwrite All**, **Don't Overwrite**, and **Ask Before Overwrite** (checked by default). Click relevant radio button to select the requested method.*

A.6 DELETE FINGERPRINTS

The Fingerprint Server application enables deleting fingerprint data from the local PC. This is part of the remote fingerprint management system that allows changing (adding, deleting, editing etc.) fingerprint data on remote clocks from one or more selected PC's in the organization. Clicking **Delete Fingerprints** in the main Fingerprint Server window displays the following window (A.6 Figure A-19):

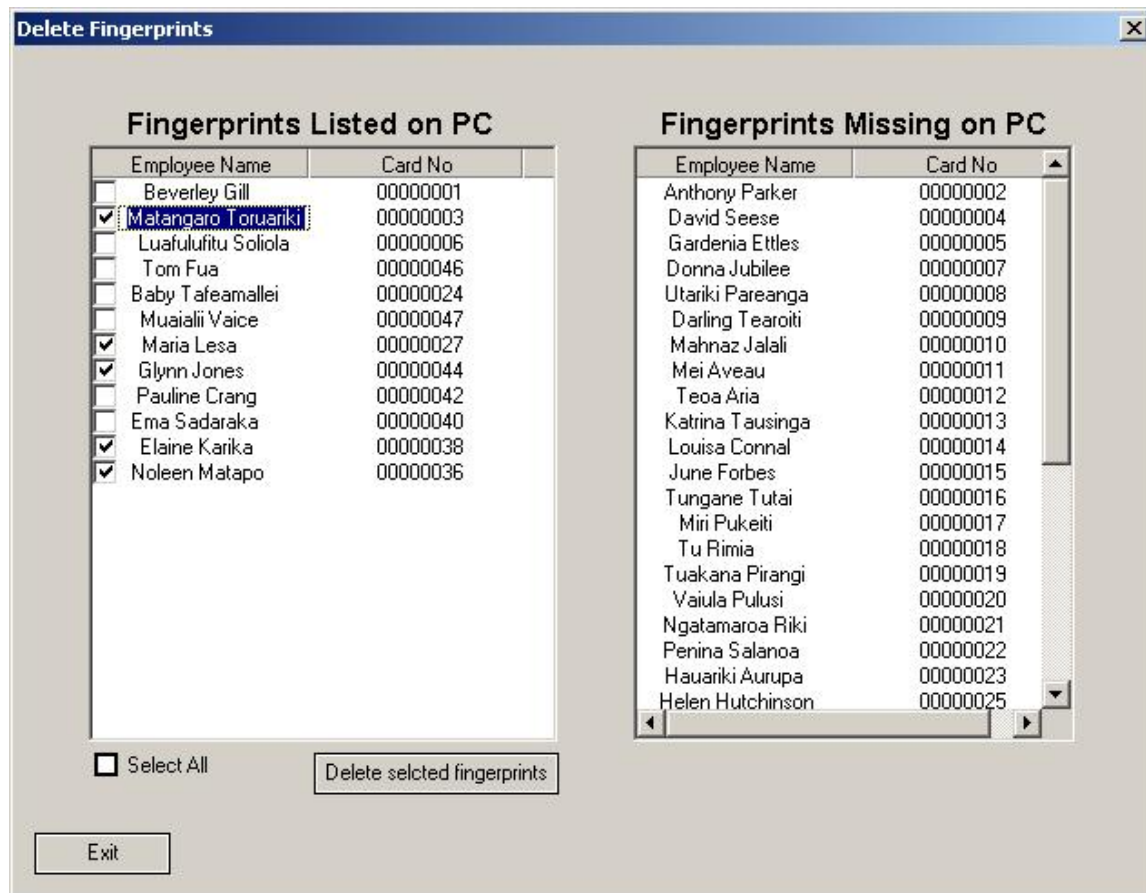


Figure A-19: Fingerprint Server – Delete Fingerprints

The window displays two lists:

- **Fingerprints Listed on PC** - a list of all employees on the PC, that have fingerprint data
- **Fingerprints Missing on PC** - a list of employees on the PC without fingerprint data

To delete some or all fingerprint data on local PC:

- 1 Check one or more employees that appear on the **Fingerprints Listed on PC** list (checking **Select All** checkbox selects all employees)
- 2 Click **Delete selected fingerprints**
- 3 The selected employees' fingerprints data is deleted, and these employees disappear from the **Fingerprints Listed on PC** list, and appear on the **Fingerprints Missing on PC** list.
- 4 Click **Exit** to exit the Delete Fingerprints window and return to Fingerprint Server application's main window.

Appendix B.

ONLINE QUERY SERVER

The Online Query Server enables InTagral time clocks to interface with a third party database.

The Query Server enables employees or supervisors to use the clock's keypad and screen for querying different types of online information; for example: personal Flexitime information, overtime hours, personal absence hours, exceptions, etc.

The Query Server can also be used for access control and meal-ticket printing.

The Query Server tool is installed automatically upon installation of the ClockComm application.

The Query Server always runs on the same computer of the database.

For further information about using the Query Server tool with a third party database, please contact Micronet local distributor.

To enable Clock--Server --Communication, configure the server's IP address in the relevant InTagral clock. For detailed information about configuring the IP address in InTagral time clocks, see '**3.3.7 To specify the Query Server communication data**' in the InTagral Clock User Guide.