USER MANUAL

COMPUTERIZED REGISTRATION MANAGEMENT SYSTEM
(CRMS)

PHASE 2
SITE ATTENDANCE MODULE
(SATM)

Version 2.0

DEC 2011

Construction Workers Registration Authority (CWRA)

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Amendment History

Change Number	Revision Description	Pages Affected	Revision Number	Date
1.	Initial draft		1.0	26-Feb-2007
2.	Revised all Screen Capture for SATM 4.0.0 and SATM Lite 4.0.0 under Windows 7 environment		2.0	07-Dec-2011

Table of Contents

1 INTRODUCTION ---------- 1

1.1 BACKGROUND ---------- 1
1.2 SATM IMPLEMENTATION OPTIONS ---------- 1
1.3 SITE ATTENDANCE MODULE (SATM) ---------- 2
1.4 SITE ATTENDANCE MODULE – SIMPLIFIED VERSION (SATM-LITE) ---------- 3

2 OPTION 1 – USE OF SATM-LITE ONLY ---------- 4

2.1 SATM-LITE PROCESS FLOW ---------- 5
2.2 SATM-LITE FUNCTIONS ---------- 6
2.2.1 Login SATM-Lite ---------- 6
2.2.2 Set Up Of User Accounts & System Parameters ---------- 7
2.2.2.1 User Maintenance ---------- 7
2.2.2.2 System Parameter ---------- 7
2.2.3 Import of CWRA Code Table ---------- 10
2.2.4 Worker Management ---------- 10
2.2.4.1 Worker Maintenance ---------- 10
2.2.5 Export of Worker Data ---------- 12
2.2.5.1 Export of Worker Registration Record ---------- 12

3 OPTION 2 – USE OF ALL SATM FUNCTION ---------- 14

3.1 SATM PROCESS FLOW ---------- 15
3.2 SATM FUNCTIONS - FLOW 1: SITE WORKER REGISTRATION ---------- 1
3.2.1 Login Worker Registration Module ---------- 1
3.2.2 Set Up Of User Accounts & System Parameters ---------- 2
3.2.2.1 User Maintenance ---------- 2
3.2.2.2 System Parameter ---------- 3
3.2.3 Import of CWRA Code Table Manually ---------- 5
3.2.4 Contract/Site Setup & Worker Maintenance ---------- 5
3.2.4.1 Contract Information ---------- 5
3.2.4.2 Sub-Contractor Information ---------- 8
3.2.4.3 Site Information ---------- 9
3.2.4.4 Worker Maintenance ---------- 11
3.2.5 Export Access Control List & Worker Registration Record ---------- 16
3.2.5.1 Sync. Worker Details to Attendance Capture Module (Same Machine) ---------- 16
3.2.5.2 Export of Access Control List ---------- 17
3.2.5.3 Export of Worker Registration Records ---------- 17
3.3 SATM FUNCTIONS - FLOW 2: SITE ATTENDANCE TAKING (ATTENDANCE CAPTURE MODULE) ---------- 19
3.3.1 Login Attendance Capture Module ---------- 19
3.3.2 Import Worker Access Control Data ---------- 20
3.3.2.1 Import of Access Control ---------- 20
3.3.2.2 Import of Worker Registration Record ---------- 21
3.3.3 Reader Set Up & Attendance Capturing ---------- 21
3.3.3.1 Card Reader Information ---------- 21
3.3.3.2 Attendance Capture ---------- 22
3.3.4 Export of Attendance Record ---------- 26

3.3.4.1 Sync. Attendance Records to Worker Registration Module (Same Machine) ---- 26
3.3.4.2 Export of Attendance Record ---------- 26
3.4 SATM FUNCTIONS - FLOW 3: LABOUR RETURN GENERATION AND SUBMISSION (WORKER REGISTRATION MODULE)---------- 27
3.4.1 Login Worker Registration Module ---------- 27
3.4.2 Import of Attendance Records---------- 27
3.4.3 Generation & Submission of Labour Return ---------- 27
3.4.3.1 Edit of Daily Attendance Records ---------- 28
3.4.3.2 Submit / Export of Attendance Records ---------- 29
3.4.3.3 GF527 ---------- 30
3.4.3.4 GF527A ---------- 32
3.4.3.5 Qualified Tradesman Report (Submission Details) ---------- 35
3.4.3.6 Qualified Tradesman Report (Submission Summary) ---------- 36

4 OPTION 3 - USE OF PARTIAL SATM FUNCTIONS (WORKER REGISTRATION & LABOUR RETURN GENERATION) ---------- 38

4.1 SATM PROCESS FLOW ---------- 39
4.2 SATM FUNCTIONS - FLOW 1: SITE WORKER REGISTRATION ---------- 40
4.3 SATM FUNCTIONS - FLOW 2: CONTRACTOR'S ACCESS CONTROL SYSTEM (OUT OF THE SCOPE OF THIS MANUAL) ---------- 40
4.4 SATM FUNCTIONS - FLOW 3: LABOUR RETURN GENERATION AND SUBMISSION (WORKER REGISTRATION MODULE)---------- 40

5 APPENDIX A – OTHER SATM-LITE FUNCTION ---------- 41

5.1.1 System Functions---------- 41
5.1.1.1 User Group Maintenance ---------- 41
5.1.1.2 Group Function Maintenance---------- 41
5.1.1.3 Login History---------- 42
5.1.1.4 System Backup---------- 43
5.1.1.5 System Restore---------- 44

6 APPENDIX B – OTHER SATM FUNCTION ---------- 45

6.1.1 System Functions---------- 45
6.1.1.1 User Group Maintenance ---------- 45
6.1.1.2 User Functions Enquiry---------- 45
6.1.1.3 Group Function Maintenance---------- 46
6.1.1.4 Login History---------- 47
6.1.1.5 System Backup---------- 48
6.1.1.6 System Restore---------- 49
6.1.1.7 Report Submission Warning ---------- 49
6.1.1.8 Archive Attendance Records---------- 50
6.1.1.9 Restore Attendance Records---------- 50
6.1.2 Interface---------- 50
6.1.2.1 Import of Sub-Contractor---------- 50
6.1.2.2 Import of Reporting Records---------- 51
6.1.2.3 Export of Reporting Records---------- 52
6.1.3 Master Maintenance---------- 54
6.1.3.1 Contractor Customized Option---------- 54
6.1.3.2 Certificate Information---------- 54
6.1.3.3 Related Certificate Maintenance---------- 55
6.1.4 Worker Management ---------- 56

6.1.4.1 Enquiry of Workers in Sites ---------- 56
6.1.5 Report ---------- 58
6.1.5.1 GF527 ---------- 58
6.1.5.2 GF527A ---------- 58
6.1.5.3 Qualified Tradesman Report (Submission Detail)---------- 59
6.1.5.4 Qualified Tradesman Report (Submission Summary) ---------- 59
6.1.5.5 Daily Attendance Report---------- 60
6.1.5.6 Weekly Attendance Report ---------- 60
6.1.5.7 Exception Attendance Report ---------- 61
6.1.5.8 Change Log – GF527---------- 61
6.1.5.9 Change Log – GF527A ---------- 62
6.1.5.10 Change Log – Qualified Tradesman Report (Submission Detail) ---------- 63
6.1.5.11 Change Log – Qualified Tradesman Report (Submission Summary)---------- 64

7 APPENDIX C – SATM OPERATION MODE---------- 66

7.1.1 Description ---------- 66
7.1.2 Normal Setup ---------- 66
7.1.3 Distributed Setup---------- 67

8 APPENDIX D – PDA ATTENDANCE CAPTURE FUNCTION ---------- 70

8.1 LOGON TO ATTENDANCE CAPTURE MODULE IN PDA ---------- 70
8.2 ATTENDANCE CAPTURING SETTINGS---------- 74
8.3 ATTENDANCE CAPTURING---------- 75
8.3.1 Workers' Attendance Capturing ---------- 75
8.3.2 Attendance Records List ---------- 76
8.3.3 Attendance Records By a Date Range ---------- 77
8.3.4 Search Attendance Records by Worker Registration Number ---------- 78
8.3.5 Upload of PDA Attendance Records to SATM ---------- 79

9 APPENDIX E –WEB SUBMISSION OF LABOUR RETURNS VIA CWRA WEB PORTAL ---------- 80

9.1 OVERVIEW ---------- 80
9.2 CWRA WEB PORTAL – WEB SUBMISSION FUNCTIONS ---------- 80
9.2.1 Login---------- 80
9.2.2 Main Menu Page---------- 81
9.2.3 Add New User [LRM-WEB-001]---------- 82
9.2.4 Edit/Delete User Account Information [LRM-WEB-001] ---------- 83
9.2.5 Change User Password [LRM-WEB-002] ---------- 87
9.2.6 Edit Contract Information [LRM-WEB-003]---------- 87
9.2.7 Submit Weekly Data File (DAR) [LRM-WEB-004] ---------- 88
9.2.8 Submit Monthly Data File (GF527, GF527A & QTR) [LRM-WEB-004] ---------- 91
9.2.8.1 Submission of GF527A ---------- 91
9.2.8.2 Submission of GF527 ---------- 93
9.2.8.3 Submission of QTR---------- 95
9.2.9 Submit Data Vetting Result for GF527 [LRM-WEB-005] ---------- 97
9.2.10 Download Electronic Template of Data File [LRM-WEB-006] ---------- 99
9.2.11 Download Latest Code Tables [LRM-WEB-007]---------- 99
9.2.12 Enquire/Download Submitted Data Files [LRM-WEB-008] ---------- 100
9.2.13 Enquire / Download Submitted DAR [LRM-WEB-009] ---------- 101
9.2.14 Request SAM Card/Web Submission Administrator Account Authentication Details [LRM-WEB-010]---------- 103

10 APPENDIX F – SATM INTERFACE FILE DEFINITION ---------- 104

10.1 OVERVIEW ---------- 104
10.2 INTERFACE FILE OF SATM – WORKER REGISTRATION MODULE AND ATTENDANCE CAPTURE MODULE/CONTRACTOR'S COMPUTER SYSTEM ---------- 104
10.3 INTERFACE FILE FOR ARCHIVED ATTENDANCE RECORDS ---------- 110
10.4 INTERFACE FILES FOR SATM SETUP WITH REGISTRATION MODE AND REPORTING MODE110

11 APPENDIX G – SATM EXPORTED DAILY ATTENDANCE REPORT AND LABOUR RETURNS NAMING CONVENTION & DEFAULT PATH---------- 113

11.1 NAMING CONVENTION & DEFAULT PATH ---------- 113

1 Introduction

1.1 Background

The **Computerized Registration Management System-Site Attendance Module (SATM)** is a simple utility for Construction Company to authenticate and extract data of the worker registration card issued by the **Construction Workers Registration Authority (CWRA)**. Furthermore, it also allows the taking of attendance at site and consolidation of the attendance records for the generation of the Daily Attendance Report & other relevant Labour Returns (i.e. GF527, GF527A and Qualified Tradesman Report) for public contracts.

Beside the full version of SATM, there is also a simplified version of the program SATM-Lite. This simplified version would only provide the authentication and extract of data from the worker registration card functions only.

Depends on the computer system infrastructure of the individual Construction Company concerned, they could choose to use the full version SATM program or the SATM-Lite version.

1.2 SATM Implementation Options

The main section of this manual aims to illustrate the common implementation options available for construction site in an easy to read documentation*. The options describes are:

1. **Use of SATM-Lite only**

   This option is suitable for Construction Company with internal computer management system that is capable of taking attendance record and generation of the relevant Labour Returns.

2. **Use of all SATM functions**

   This option is suitable for Construction Company without any internal computer system for attendance taking and Labour return generation.

3. **Use of partial SATM functions (Worker Registration & Labour Return Generation)**

   This option is suitable for Construction Company with a simple Access Control system that can record and output the attendance records in SATM pre-defined format.

** Note: Other available functions, which are not mentioned in the option implementation sections, are described in the Appendix for reference.*

1.3 Site Attendance Module (SATM)

The Site Attendance Module consists of the following main components:

1. Worker Registration Module
2. Attendance Capture Module
3. PDA Attendance Capture

Worker Registration Module
The **Worker Registration Module** provides two main functions: Worker Registration and Preparation/Submission of Labour Returns for sites.

For Worker Registration function, user(s) can setup the details information for the contract(s), sub-contractor(s), site(s), etc. The function provides a facility to authenticate and retrieval of worker's information including his/her trade details from the worker registration card. User(s) can assign each worker to the intended site(s) and sub-contractor. Afterward, exports the lists of access control and workers' details for use within the **Attendance Capture Module**, **PDA Attendance Capture** or external Access Control System of the contractor.

For Preparation/Submission of Labour Returns function, user(s) can import the attendance records into the **Worker Registration Module** from the **Attendance Capture Module**, **PDA Attendance Capture** or external Access Control System of the contractor. The system allows the consolidation and generation of the relevant Labour Returns, and user(s) can submit them to **CWRA** portal site directly (if internet access is available), or the reports may be exported to excel files and submitted through internet* via other internet accessible machine. Contractor may also be able to print the Labour Returns as hardcopy for their reference.

**** Refer to "Appendix E – Web Submission of Labour Returns via CWRA Web Portal" for instructions on using the CWRA web portal for submitting Labour Returns.***

Attendance Capture Module
The **Attendance Capture Module** basically provides the workers' attendances time-recording function without any access control elements. The workers' details and access control can be imported into the module and the files are exported from the **Worker Registration Module**. User(s) can assigns the checking direction as **"IN"** or **"OUT"** for the smartcard reader(s). All attendance records are available to export for Labour Returns in **Worker Registration Module**.

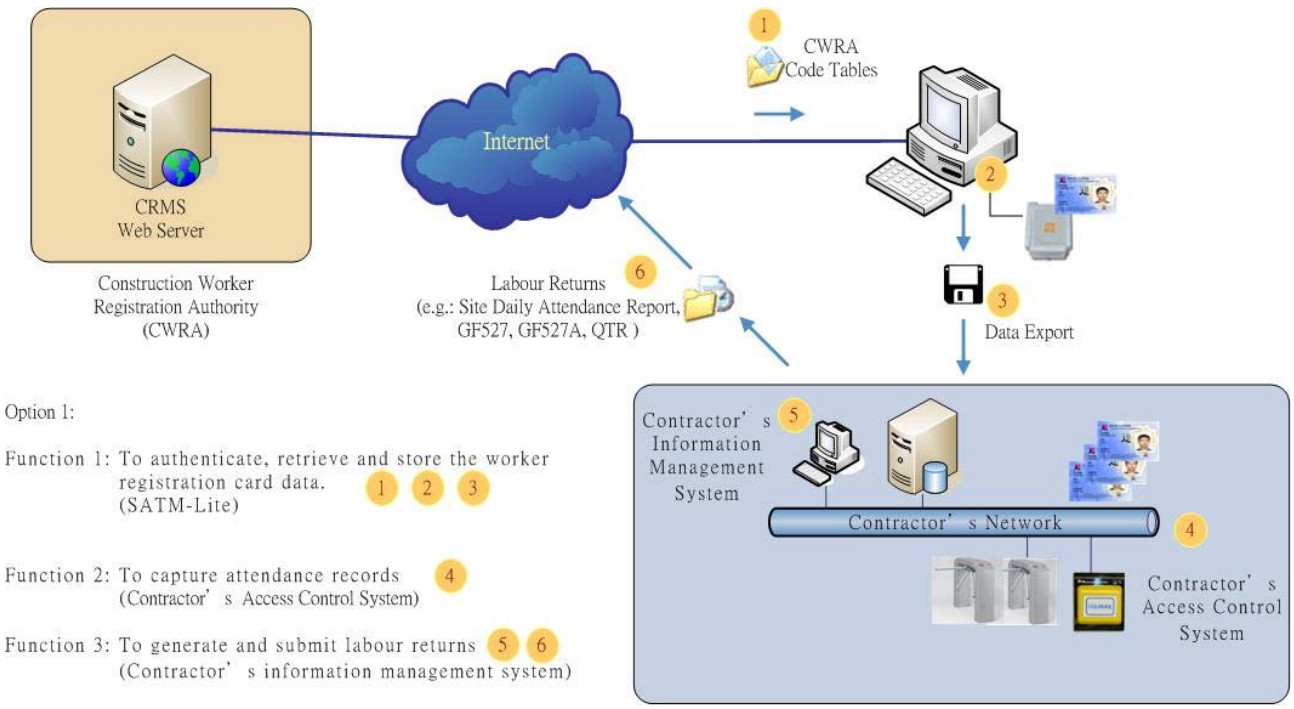
PDA Attendance Capture
The **PDA Attendance Capture** provides the similar functionalities as those in **Attendance Capture Module** albeit in a simplified form. The application only records the workers' attendances using a single compact flash (CF) smartcard reader. The workers' details and access control will be saved in the Secure Digital (SD) card that has been inserted into the PDA's slot. User(s) can assign the CF smartcard reader as either **"IN"** or **"Out"** checking direction. The attendance records captured will be automatically saved in the SD card for import into **Worker Registration Module**.

1.4 Site Attendance Module – Simplified Version (SATM-Lite)

The SATM-Lite is a simplified version of the SATM program. It only provides the function that allows the user to authenticate and extract the relevant data of the construction worker registration card and export the saved records to pre-defined text files.

2 Option 1 – Use of SATM-Lite Only

This option uses the simplest form of the Site Attendance Module program - SATM-Lite. Since this program only provides the authentication and extraction of data from the Construction Workers Registration Card, Construction Company should already possessed appropriate computer infrastructure that can record worker attendance records and generate the relevant Labour Returns* (i.e. Daily Attendance Report, GF527, GF527A, and Qualified Tradesman Report). The interfaces between the SATM program and the company's computer system are through the pre-defined text files as defined in "Appendix F – SATM Interface File Definition". Below is a summary diagram of the propose option's setup:

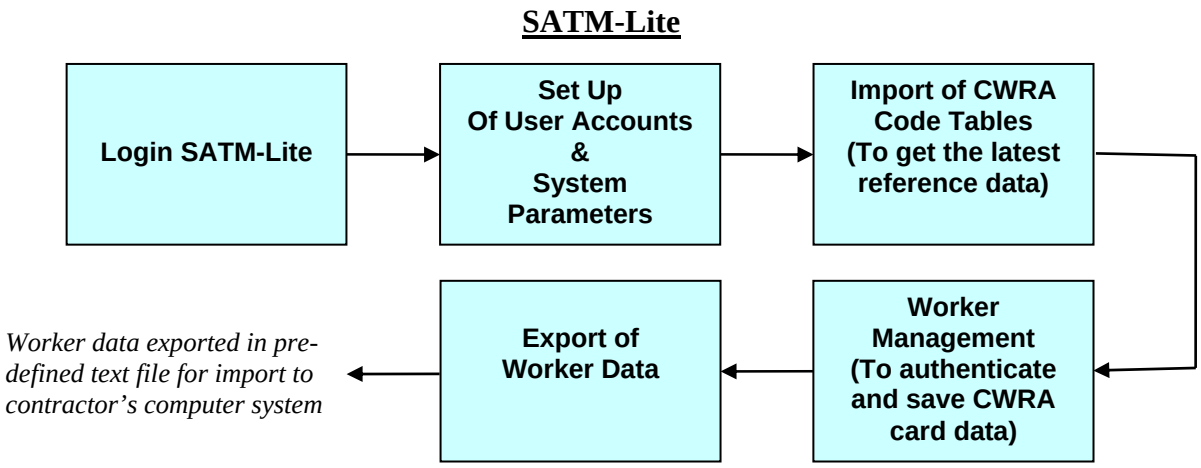


Option 1

** Note: Contractors must use the official CWRA templates for the generation of the Labour Return. These templates can be downloaded from CWRA web site.*

The following sub-sections illustrate the operation of SATM-Lite.

2.1 SATM-Lite Process Flow



2.2 SATM-Lite Functions

This section describes the main programs related to the process flow as illustrated in section 2.1. Refer to Appendix A for other SATM-Lite functions that are not mentioned here.

2.2.1 Login SATM-Lite

- Double click on “CRMS-SATM-Lite” icon on the desktop.

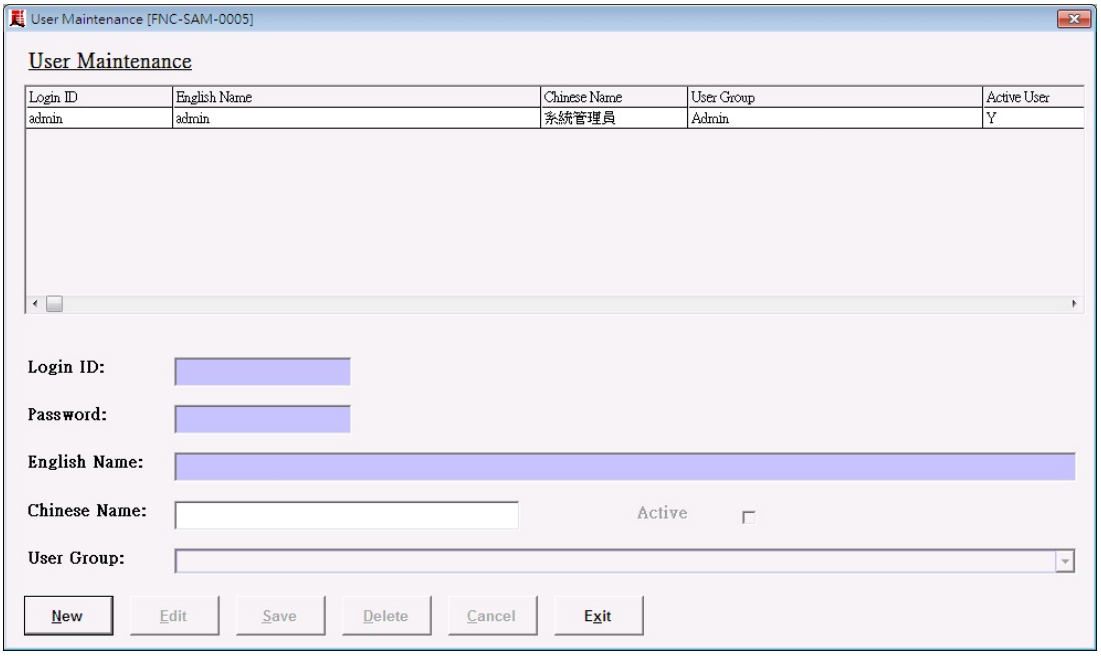
- The Login screen displays.
- Select the “Language”, prompt in “Login ID” and “Password”, and then click on “Login” button to login to the program. The default login for an all new installed system is “admin” (Login ID) and “admin” (Password).
- The program ONLY allows to logon once at the same time.

- Language : select language to display for the operation of SATM.

2.2.2 Set Up Of User Accounts & System Parameters

2.2.2.1 User Maintenance

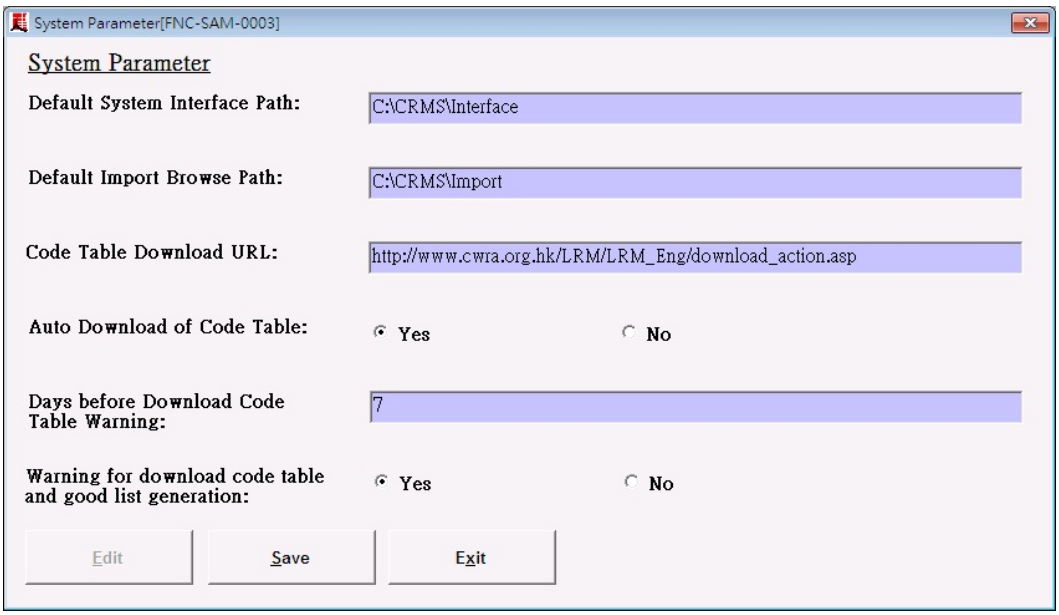
- Click the menu items: ***System → User Maintenance***



- A default user account (admin) has been already created in the sysetem which belongs to the "Admin" user group. User may create, edit , delete any user account using this program using the button New, Edit, Delete respectively.
- The Save button saves any changes. The Cancel button clear the form. The Exit button exit the program withour saving.

2.2.2.2 System Parameter

- Click the menu items: ***System → System Parameter***



- Click the Edit button to change the values when necessary. If internet is accessible by the machine, check the the parameter "Auto Download of Code Table" to "Yes" value for auto updates of the required reference table data.
- Click Save button to save changes.
- Note, for "Auto Download of Code Table" that is set to "Yes", user must exit SATM-Lite and re-logon to it so that it will automatically download the CWRA reference tables' data into the system. The first logon the program on everyday will download the reference tables automatically.

The following table lists the use of the paramters:

Parameter Name	Default Value	Usage
Default System Interface Path	C:\CRMS\Interface	Directory to import or export the following interface files for the system: - Export of Workers Registration Records
Default Import Browse Path	C:\CRMS\Import	Directory to store the files of CWRA code tables to import for the system. This will be using to the function "Import of CWRA code Table".
Code Table Download URL	http://www.cwra.org.hk/LRM/LRM_Eng/download_action.asp	The URL for downloading the code tables from CWRA to the system.
Auto Download of Code Table	"No"	To activate the auto update function for the code tables from CWRA on first logon each day, change the value to "Yes". *Note, internet access must be available to the machine for this function to operate normally.*

Days before download code table warning	“7”	Number of days where the zip_code400.zip has not been updated through SATM-Lite
Warning for download code table and good list generation	“Yes”	To activate the warning reminder to remind the user to update the zip-code

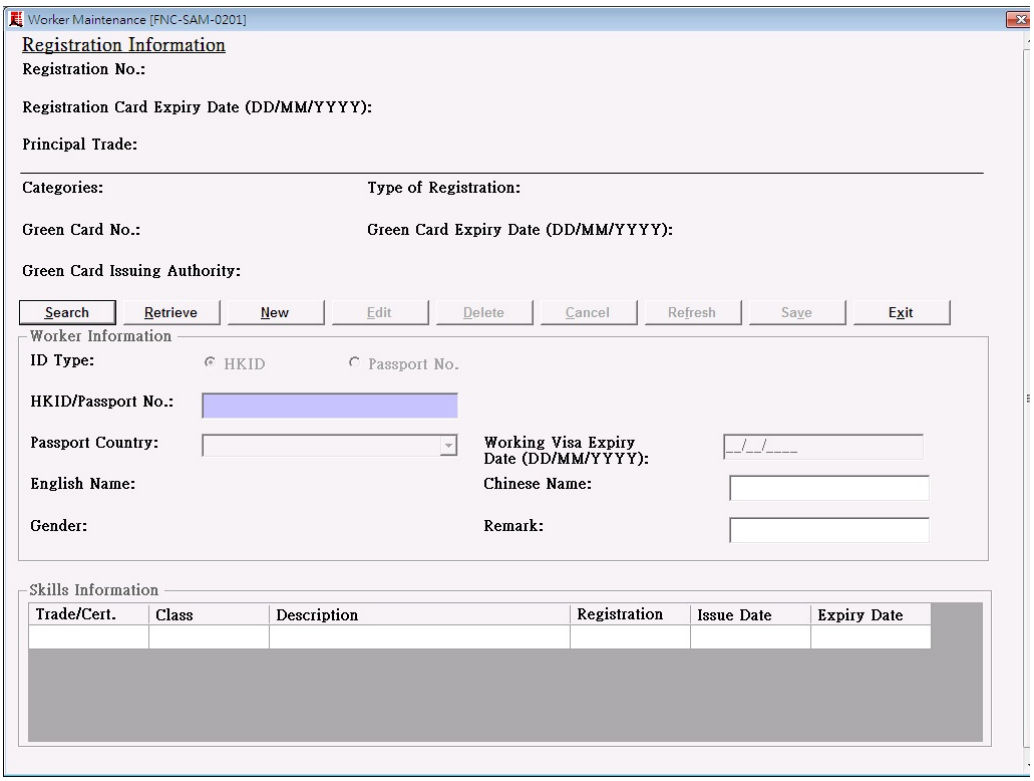
2.2.3 Import of CWRA Code Table

- If internet is not available for the machine, user may manually import the reference table data to the system from CWRA web portal. However, if the system parameter "Auto Download of Code Table" has been set to "Yes" and internet connection is available, then user does not need to import the data manually.
- To import manually, click the menu items: ***Interface → Import → Import of CWRA Code Table***
- Before clicking the Import button, ensure that the latest CWRA code table zip file (zip_code400.zip) has been downloaded from CWRA website (see section 9.2.11 Download Latest Code Tables [LRM-WEB-007] function to download the latest code table) and placed in the default directory (e.g. C:\CRMS\Import).
- Click the Import button to import the contents of the CWRA code tables into the system. Messages will indicate whether the imports are successful or not.

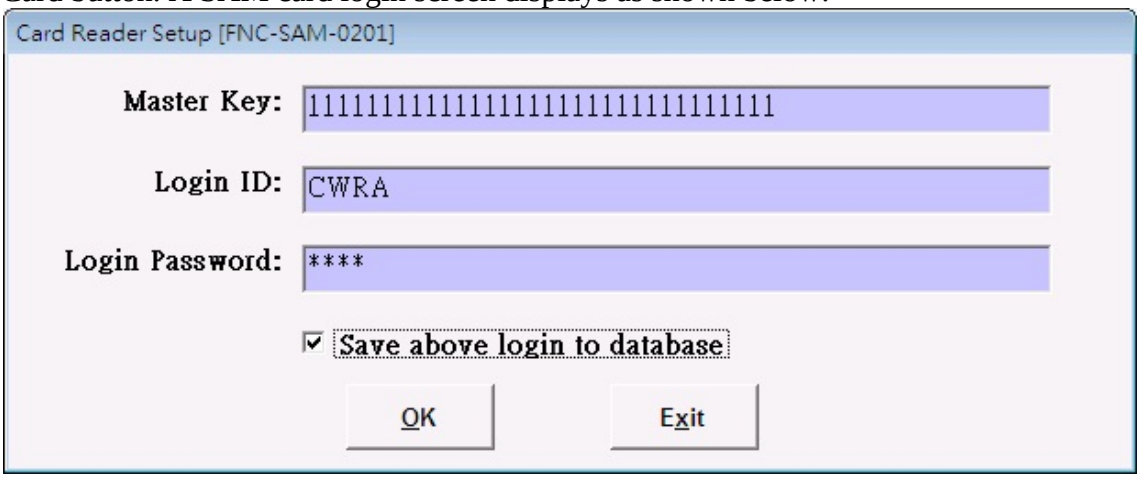
2.2.4 Worker Management

2.2.4.1 Worker Maintenance

- Click the menu items: ***Worker Management → Worker Maintenance***

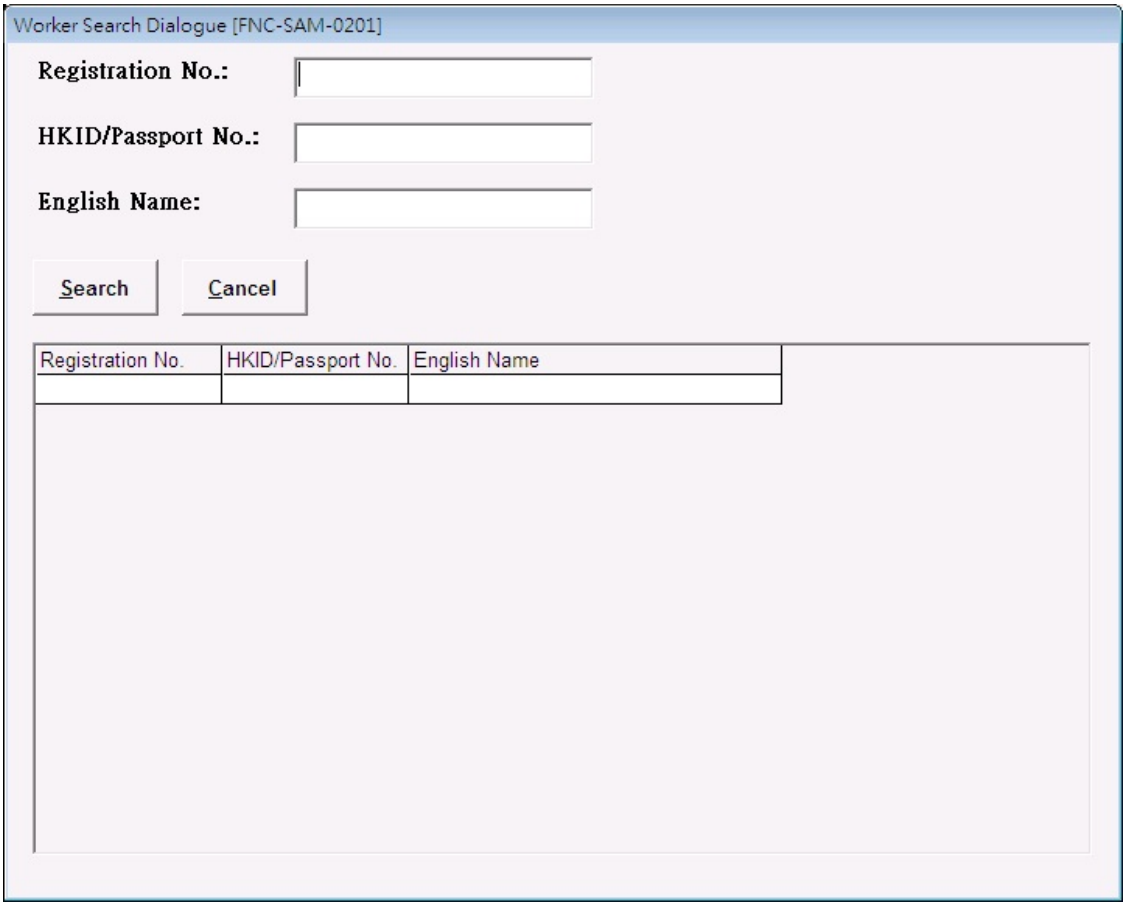


- This function allows the user to authenticate the CWRA Worker Registration Card, retrieve and save the card's details into the system.
- Before using this function, ensure that the Secure Authentication Module (SAM) card has been inserted in the SAM slot of the card reader.
- Click the New button, place the worker card on the card reader and click the Refresh Card button. A SAM card login screen displays as shown below:



- Enters the login credential (provided by CWRA after applied SAM card successfully) for the SAM card and click OK to proceed. The "Save above login to database" checkbox function has been enabled for the default admin account. User may check the checkbox. After system's verification of the login information, it would save it to the system's database and future calls on the function would use the saved login information for the login of the SAM card.
- The program will, after authentication of login credential and the worker card, retrieve the relevant worker data into the system. The function will only ask for the login credential once until the function is exited. Therefore, subsequent read will not request the login credentials. However, after exiting the system, the login credential will be requested again when user re-login the system.

- Since the program only retrieve the masked HKID/passport number, user must edit the field to the actual number. Other editable fields may be changed accordingly.
- Click Save button to save the record.
- The Retrieve button allows the direct search of the stored database record based on the serial number of the worker card read by the reader. Therefore, to use this function, the worker card must be placed on the reader.
- The Edit button is to edit an existing record. When under edit mode, if the Refresh Button is clicked, the updated record details from the worker card will be updated to the system.
- The Delete button is to delete an existing record.
- The Cancel Button is to clear the form and the Exit button is to exit the program without saving.
- The Search button is to search a particular record. After clicking the button, the below screen appears:

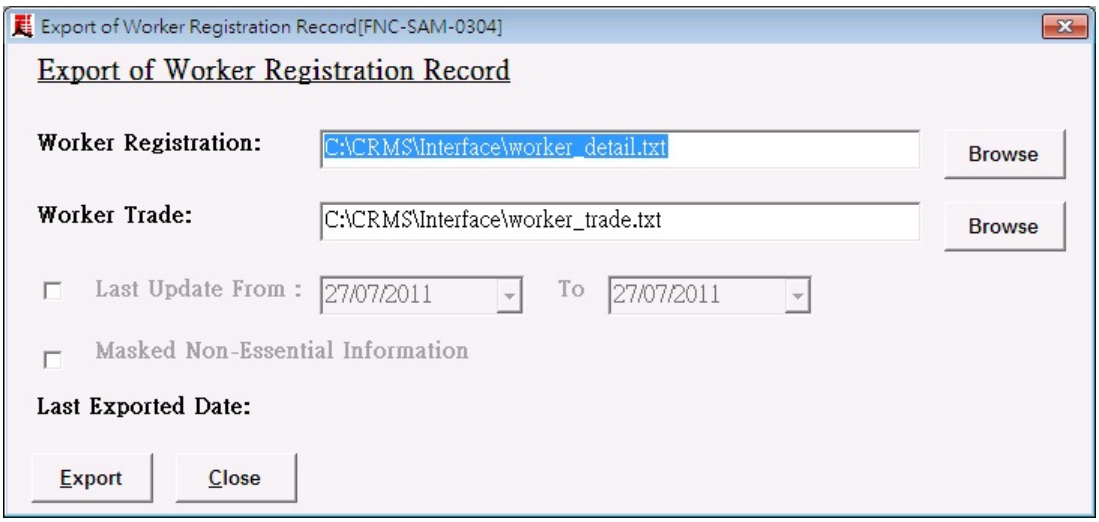


- Search criteria can be inputted to filter the result set.

2.2.5 Export of Worker Data

2.2.5.1 Export of Worker Registration Record

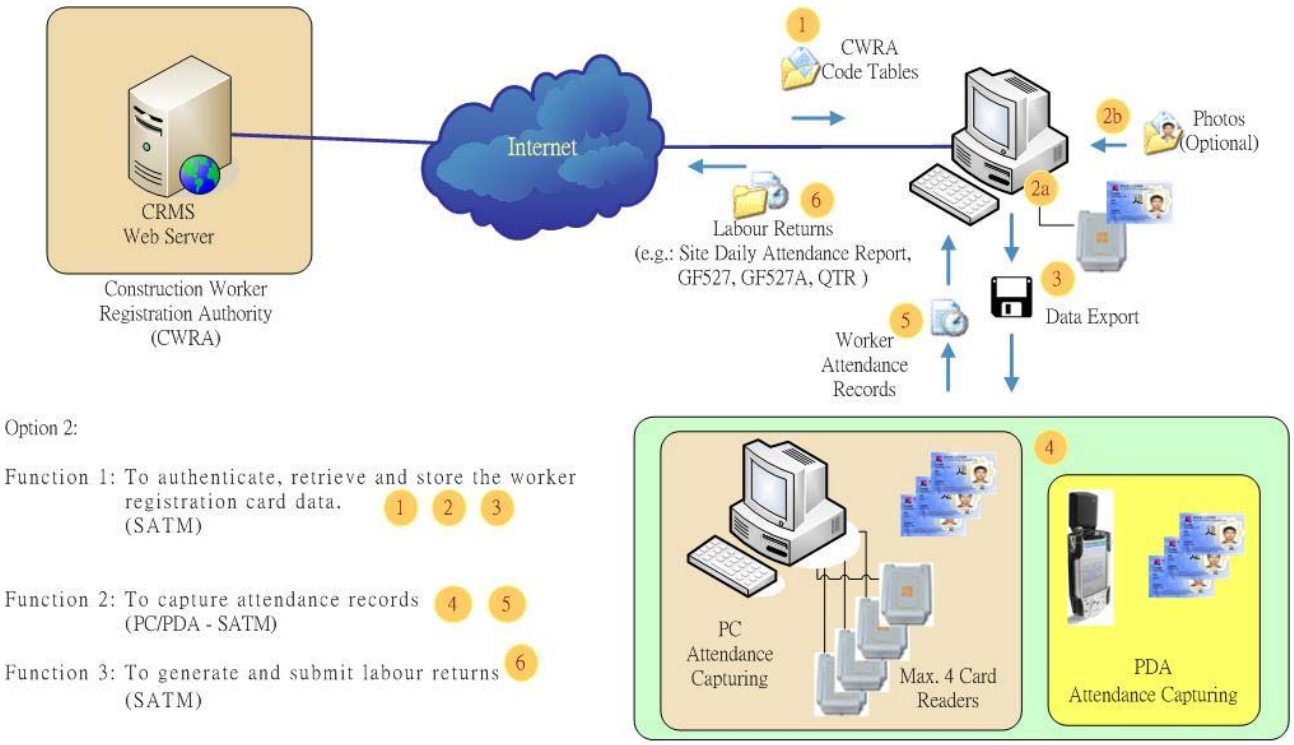
- Click the menu items: ***Interface → Worker Maintenance → Export →Advance → Export of Worker Registration Record***



- Modify the filename for the Worker Registration or Worker Trade as required. Use Browse button to change the target file to an existing name.
- The Last Update From date range may be set as a filter for the retrieve data. The default is un-checked for this criteria which means that all data will be extracted.
- When we checked “Masked Non-Esential Information”, non-esential information for the taking of Attendance records e.g. HKID are masked as “X”.
- Click Export button to export the data to the two targetted file.
- Click Close button to exit the program.

3 Option 2 – Use of All SATM Function

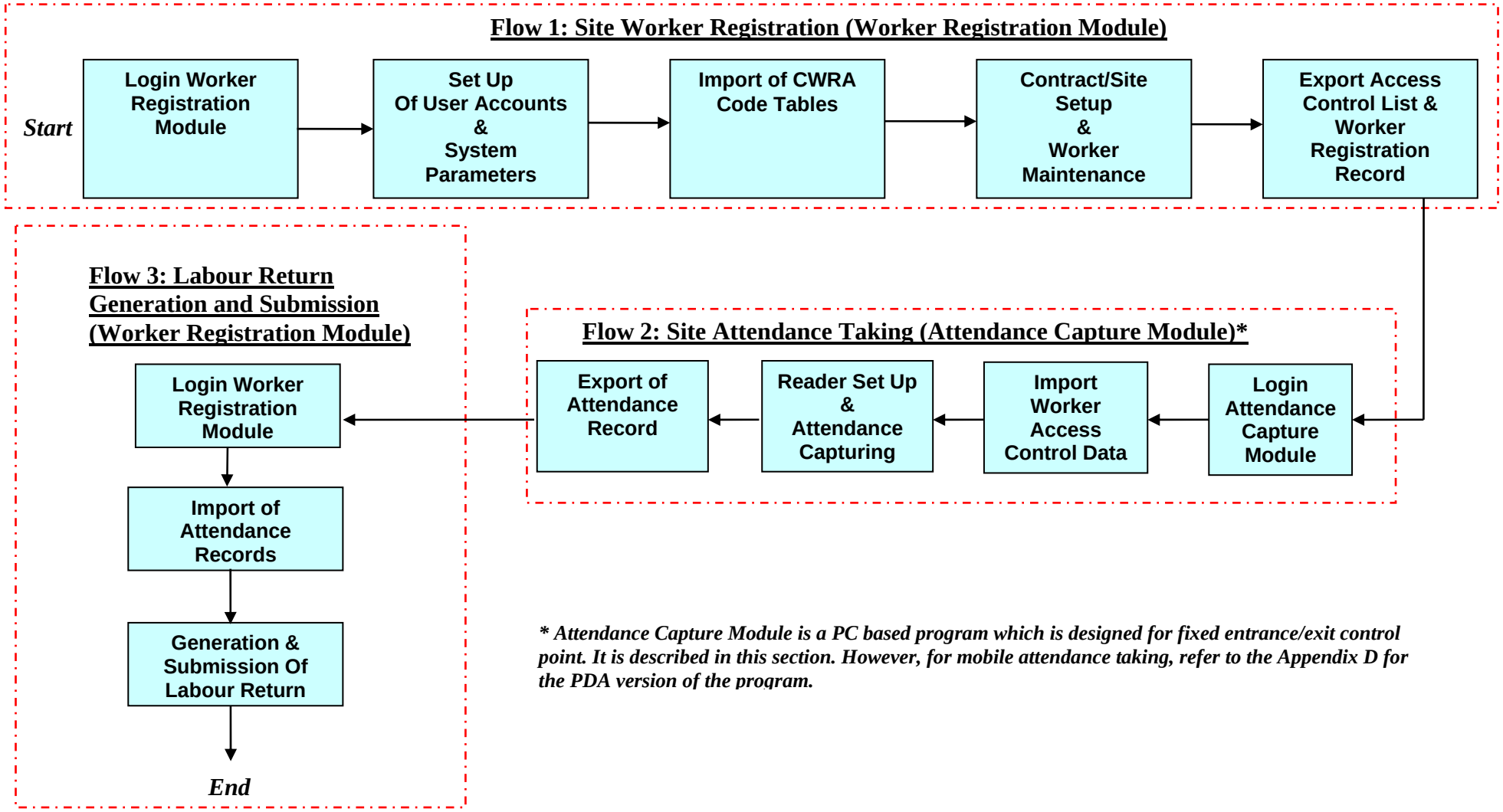
This option uses the full version of the SATM program (i.e. Worker Registration, Attendance Capturing, and Labour Return generation functions). It is suitable for Construction Company that does not have any computer system which can handle the attendance capturing and Labour Return generation functions. Below is a summary diagram of the propose option's setup:



Option 2

The following sub-sections illustrate the operation of SATM. The example uses SATM full version with both the Worker Registration Module and Attendance Capture Module installed in the same computer.

3.1 SATM Process Flow



** Attendance Capture Module is a PC based program which is designed for fixed entrance/exit control point. It is described in this section. However, for mobile attendance taking, refer to the Appendix D for the PDA version of the program.*

3.2 SATM Functions - Flow 1: Site Worker Registration

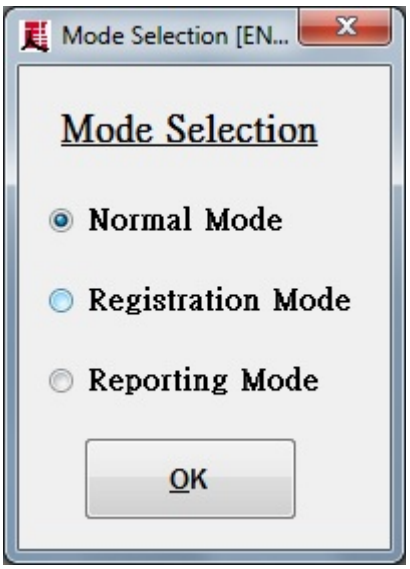
This section describes the main programs related to Flow 1 – Site Worker Registration as illustrated in section 3.1. Therefore, it will concentrate on the functions such as site setup, authentication and reading of worker registration card's data, and export of the saved data to pre-defined interface text files. Refer to Appendix B for other functions related to the site worker registration activities that are not mentioned here.

3.2.1 Login Worker Registration Module

- Double click on "CRMS-SATM" icon on the Desktop

- The Login screen displays. Choose the Worker Registration Module
- Select the "Language", prompt in "Login ID" and "Password", and then click on "Login" button to login to the program. The default login for an all new installed system is "admin" (Login ID) and "admin" (Password).
- The program ONLY allows to logon once at the same time.
- Select language to be "English" or "Chinese" to operate

- If this is the first time login, the user need to setup the system in one of the three operation modes* (i.e. Normal, Registration or Reporting). This example will use the Normal mode so, choose Normal Mode and click OK button and the system would re-logon to take effect of the chosen mode. The system will not ask the mode setup again and user may see what mode the current system is by the system title next to the system icon.

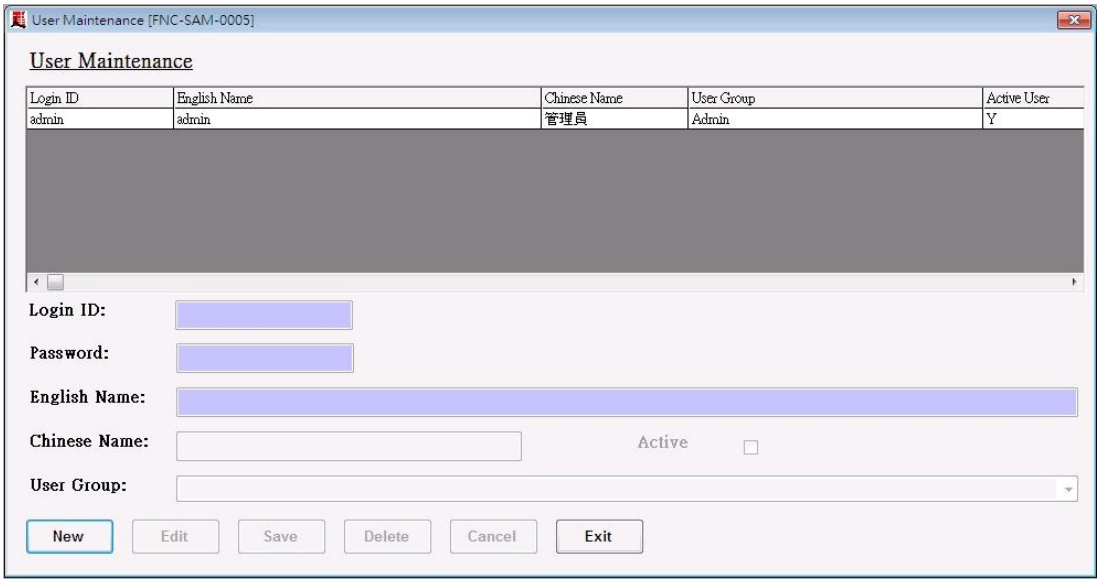


** Refer to Appendix C for the description and usage of modes.*

3.2.2 Set Up Of User Accounts & System Parameters

3.2.2.1 User Maintenance

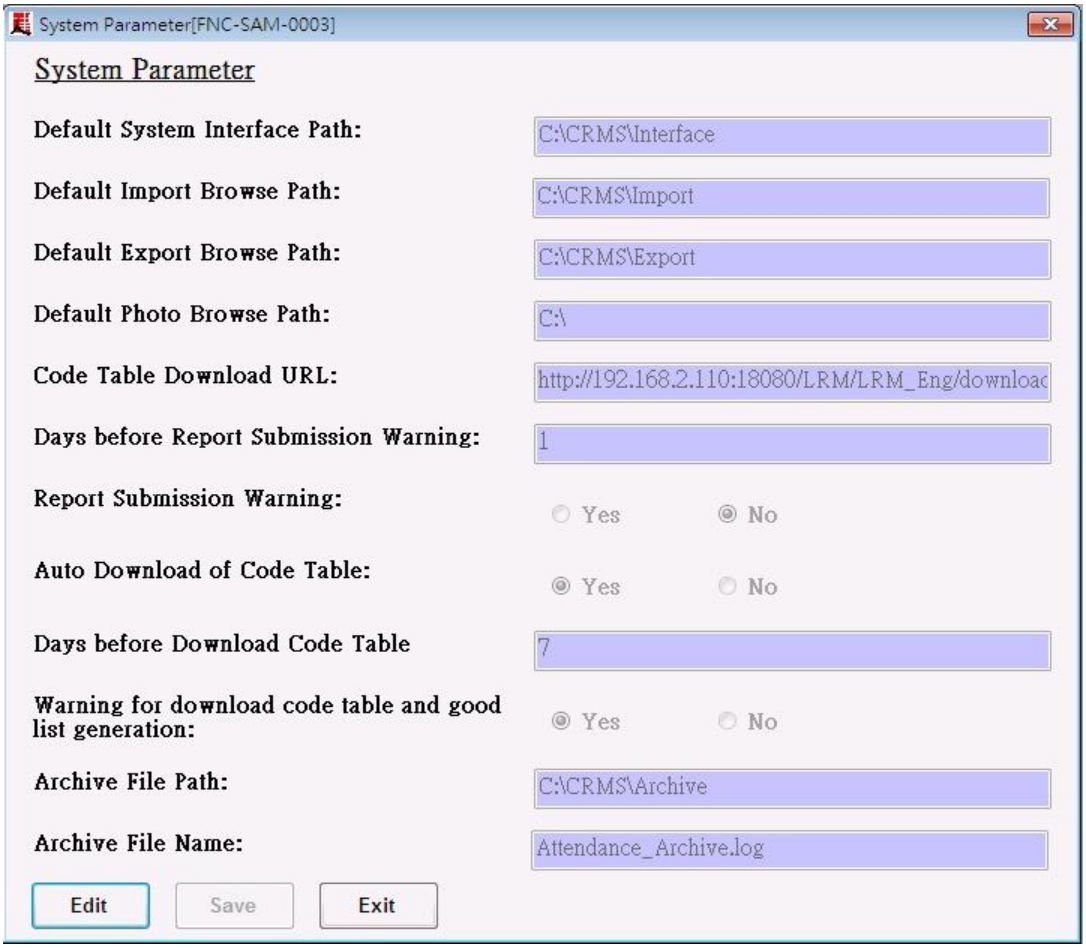
- Click the menu items: ***System → User Maintenance***



- A default user account (admin) has been already created in the sysetem which belongs to the "Admin" user group. User may create, edit , delete any user account using this program using the button New, Edit, Delete respectively.
- The Save button saves any changes. The Cancel button clear the form. The Exit button exit the program without saving.

3.2.2.2 System Parameter

- Click the menu items: ***System → System Parameter***



- Click the Edit button to change the values when necessary. If internet is accessible by the machine, check the the parameter "Auto Download of Code Table" to "Yes" value for auto updates of the required reference table data.
- Click Save button to save changes.
- Note, for "Auto Download of Code Table" that is set to "Yes", user must exit SATM-Lite and re-logon to it so that it will automatically download the CWRA reference tables' data into the system.

The following table lists the use of the paramters:

Parameter Name	Default Value	Usage
Default System Interface Path	C:\CRMS\Interface	Directory to import or export the following interface files for the system: - Import of Access Control - Import of Worker Registration Record - Import of Attendance Records - Import of sub-contractor - Export of Access Control List

		- Export of Workers Registration Records - Export of Attendance Records
Default Import Browse Path	C:\CRMS\Import	Directory to store the files of CWRA code tables to import for the system. This will be using to the function “Import of CWRA code Table”.
Default Export Browse Path	C:\CRMS\Export	Directory to export the files of Labour Returns that generated for submission to CWRA. The option “Labour Returns” will contains the following functions for the submission files: - GF527 - GF527A - Qualified Tradesman Report (Submission Detail) - Qualified Tradesman Report (Submission Summary) - Submit/Export of Attendance Records
Default Photo Browse Path	C:\	The default directory to browse photo.
Code Table Download URL	http://www.cwra.org.hk/LRM/LRM_Eng/download_action.asp	The URL for downloading the code tables from CWRA to the system.
Days before Report Submission Warning	1	Number of days to display warning message to alert user before submission deadline for Labour Returns files.
Auto Download of Code Table	“No”	To activate the auto update function for the code tables from CWRA on first logon each day, change the value to “Yes”. *Note, internet access must be available to the machine for this function to operate normally.*
Days before Download Code Table Warning	7	Number of days where the zip_code400.zip has not been updated through SATM and the warning for downloading the zip_code400.zip is shown after each login.
Warning for download code table and good list generation	“Yes”	To activate the warning reminder to remind the user to update the zip-code and regenerate the good-list for attendance module when the zip-code has not been updated

		for N days after each login. Another reminder is also popped up to reminder the user to regenerate the good list and deploy to the attendance when the user is updating the zip-code.
Report Submission Warning	"No"	To activate the warning message to remind user about the submission deadline for the Labour Returns on system login.
Archive File Path	C:\CRMS\Archive	The default path set for the attendance record archive log
Archive File Name	Attendance_Archive.log	The default name of the attendance record archive log

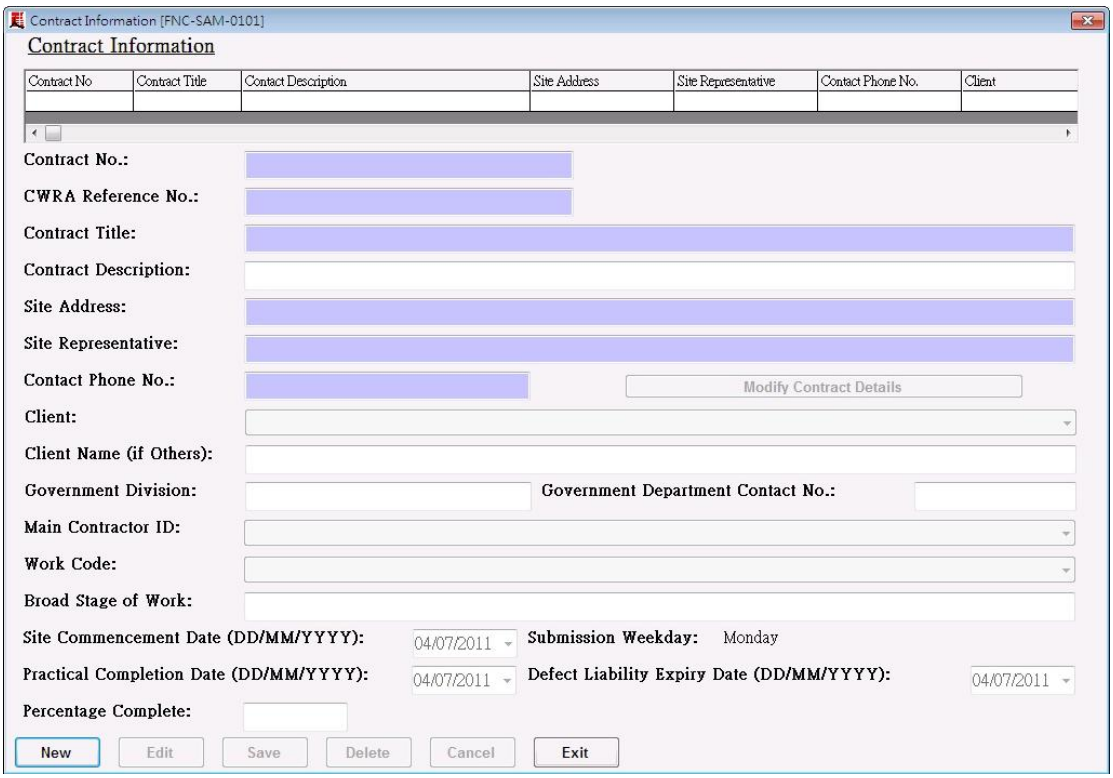
3.2.3 Import of CWRA Code Table Manually

- If internet is not available for the machine, user may manually upload the reference table data to the system. However, if the system parameter "Auto Download of Code Table" has been set to "Yes" and internet connection is available, then user does not need to import the data manually.
- To import the CWRA code table manually, click the menu items: ***Interface → Import → CWRA Interface → Import of CWRA Code Table***
- Before clicking the Import button, ensure that the lateset CWRA code tables zip file has been downloaded from CWRAwebsite (see section 9.2.11 Download Latest Code Tables [LRM-WEB-007] function to download the latest code table) and placed in the default directory (e.g. C:\CRMS\Import).
- Click the Import button to import the contents of the CWRA code tables into the system. Messages will indicate whether the imports are successful or not.

3.2.4 Contract/Site Setup & Worker Maintenance

3.2.4.1 *Contract Information*

- Click the menu items: ***Master Maintenance → Contract Information***



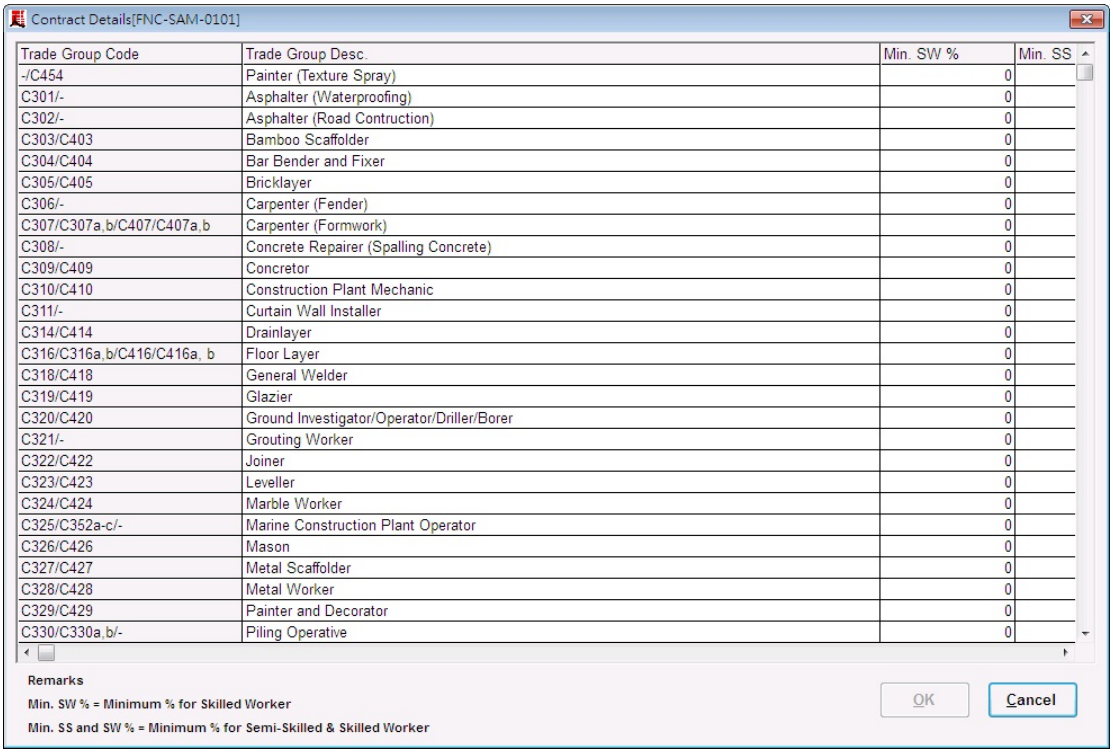
- Click the New button to create a new contract. Below are the enterable items and description:

Item	Name	Description	Mandate field?
1.	Contract No.	The contract number. For public work's contract, use the exact contract number assigned by the government department. For other, just use construction company's designated contract number	Yes
2.	CWRA Reference No.	Use the CWRA reference no. issued from CWRA when the company register the contract with CWRA.	Yes
3.	Contract Title	The title of the contract	Yes
4.	Contract Description	Description of the contract	No
5.	Site Address	Address of the construction site	Yes
6.	Site Representative	Representative of the construction site	Yes
7.	Contact Phone No.	Contact phone number of the site representative	Yes
8.	Client	For public works contract only. The government department for the contract	No
9.	Client Name (if other)	For private contract, user may enter description of the client's name here	No
10.	Government Division	For public works contract, the government division responsible	No
11.	Government Department Contact No.	For public works contract, the contact number of the government department responsible.	No
12.	Main Contractor	The registered main contractor ID	Yes

Item	Name	Description	Mandate field?
	ID		
13.	Work Code	The work code of the contract	No
14.	Broad Stage of Work	The broad stage of work	No
15.	Site Comencement Date	The start date of the contruction site	Yes
16.	Practical Completion Date	The practical completion date of the construction site	Yes
17.	Percentage Complete	The percentage completion of the construction site	No
18.	Defect Liabilty Expiry Date	The end date of the defect liabilty period	Yes
19.	Submission Weekday	The weekday for the Site Commencement date. It control the start date for the DAR	Yes

** Before the submission of DAR, please check that the site commencement date and submission weekday is align with the site commencement date on* ***Edit Contract Information [LRM-WEB-003]***

- For Public Works contracts, the Client field must be entered. If this field is entered, the button Modify Contract Details will be enabled. Click the button to enter the percentage of worker for different trades as stipulated by the public works contract. Below is an example of the screen:



Trade Group Code	Trade Group Desc.	Min. SW %	Min. SS
-/C454	Painter (Texture Spray)	0	
C301/-	Asphalter (Waterproofing)	0	
C302/-	Asphalter (Road Contruction)	0	
C303/C403	Bamboo Scaffolder	0	
C304/C404	Bar Bender and Fixer	0	
C305/C405	Bricklayer	0	
C306/-	Carpenter (Fender)	0	
C307/C307a,b/C407/C407a,b	Carpenter (Formwork)	0	
C308/-	Concrete Repairer (Spalling Concrete)	0	
C309/C409	Concretor	0	
C310/C410	Construction Plant Mechanic	0	
C311/-	Curtain Wall Installer	0	
C314/C414	Drainlayer	0	
C316/C316a,b/C416/C416a, b	Floor Layer	0	
C318/C418	General Welder	0	
C319/C419	Glazier	0	
C320/C420	Ground Investigator/Operator/Driller/Borer	0	
C321/-	Grouting Worker	0	
C322/C422	Joiner	0	
C323/C423	Leveller	0	
C324/C424	Marble Worker	0	
C325/C352a-c/-	Marine Construction Plant Operator	0	
C326/C426	Mason	0	
C327/C427	Metal Scaffolder	0	
C328/C428	Metal Worker	0	
C329/C429	Painter and Decorator	0	
C330/C330a,b/-	Piling Operative	0	

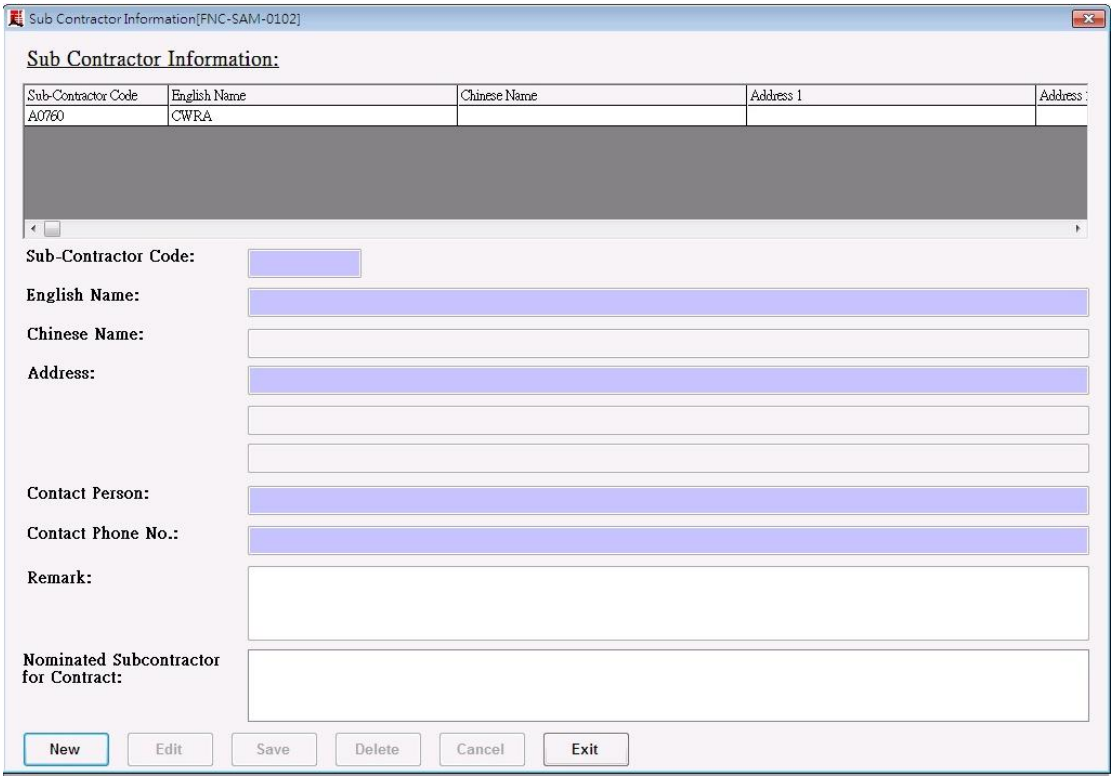
- Click on the cells to modify the min. or max. percentage of a particular trade. Click OK button to go back to the previous screen.
- Note that the date fields (Comencement Date, Practical Completion Date, Defect Liabilty Expiry Date) must adhere to the logic: Comencement Date <= Practical

Completion Date <= Defect Liabilty Expiry Date. The program will prompt error message if this logic is violated.

- After the fields are entered, click Save button to save the record.
- Upon Saving of a new contract record, the system will check whether there is a sub-contractor to represent the selected Main Contractor ID of the new contract. If no then the system will automatically re-directs to the maintain sub-contractor program. The program forces the user to create a sub-contractor to represent the main contractor. Therefore, the sub-contractor name field will be pre-allocated with the name of the main contractor. User needs to enter other relevant field (see 3.2.4.2 for information) and click Save button to accept the creation of the record. Note that user will not be allowed to save a new contract record if the user did not save a sub-contractor record for the main contractor. However, if a sub-contractor had already be created for the Main Contractor, the system will not re-direct the user to the maintain sub-contractor program.
- The Grid at the top of the screen shows the avaible contracts of the system. Double click on a chosen record to retrieve the record.
- After retrieval, user may click the Edit button to edit the record.
- Click on the Delete button will delete the current record.
- Click on the Cancel button will cancel the changes made.
- Click on the Exit button will exit the program without save.

3.2.4.2 Sub-Contractor Information

- Click the menu items: ***Master Maintenance → Sub-Contract Information***



- Click New button to create a new record. Below are the enterable items and description:

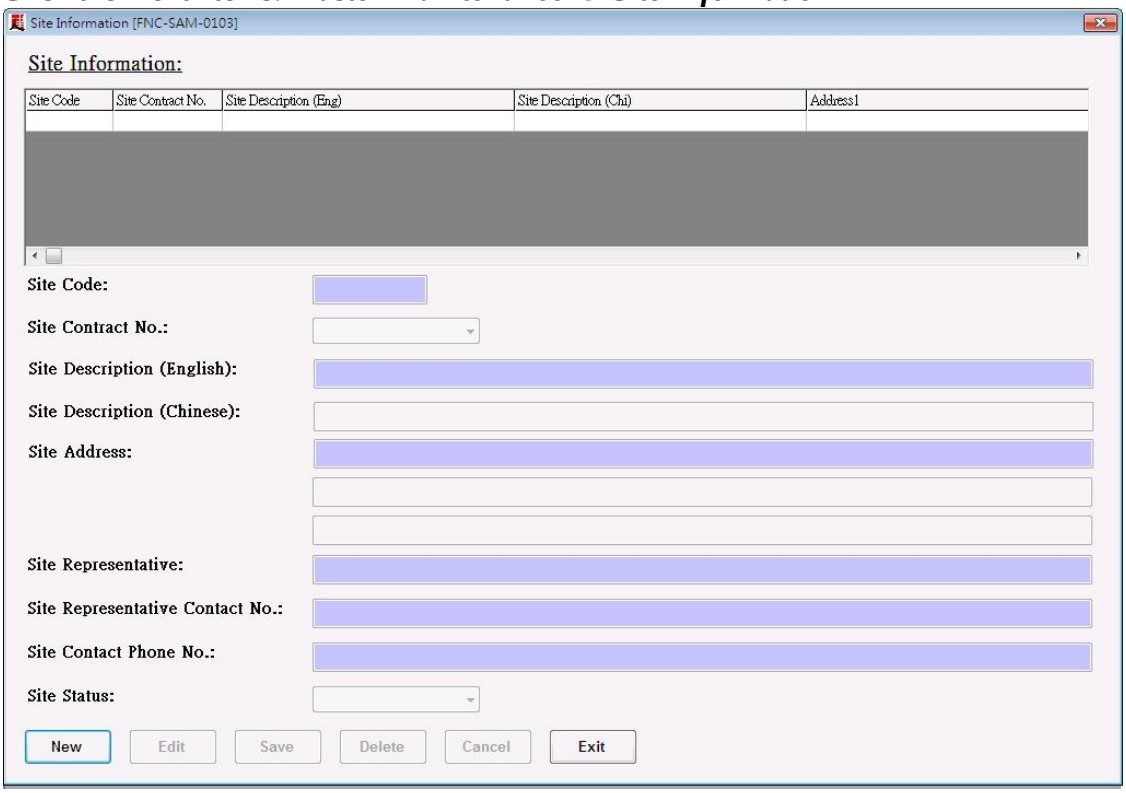
Item	Name	Description	Mandate field?
1.	Sub-Contractor Code	User assigned code for the sub-contractor	Yes

Item	Name	Description	Mandate field?
2.	English Name	English Name of the sub-contractor	Yes
3.	Chinese Name	Chinese Name of the sub-contractor	No
4.	Address	Adress of the sub-contractor	Yes for the first address line. Following 2 lines are optional
5.	Contact Person	Contact person of the sub-contractor	Yes
6.	Contact Phone No.	Contact person's phone number	Yes
7.	Remark	User remarks	No
8.	Nominated Subcontractor for Contract	Checked for a particula contract listed to indicate that the sub-contractor is a nomindated sub-contractor for the contract. Note that this is for the preperation of the Labour Return GF527 by the system.	No

- Click Save button to save the record.
- The Grid at the top of the screen shows the available sub-contractor of the system. Double click on a chosen record to retrieve the record.
- After retrieval, user may click the Edit button to edit the record.
- Click on the Delete button will delete the current record.
- Click on the Cancel button will cancel the changes made.
- Click on the Exit button will exit the program without save.

3.2.4.3 Site Information

- Click the menu items: ***Master Maintenance → Site Information***



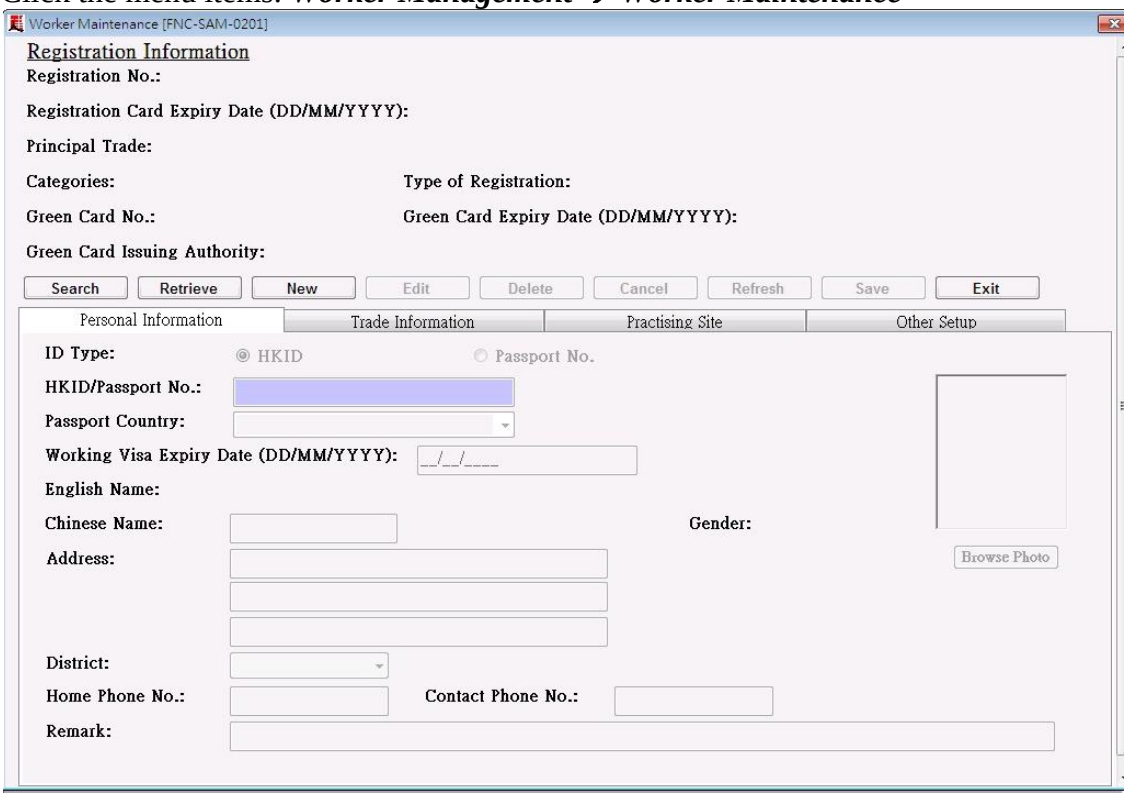
- Click New button to create a new record. Below are the enterable items and description:

Item	Name	Description	Mandate field?
1.	Site Code	User assigned code for the site	Yes
2.	Site Contract No.	The contract number for the site	Yes
3.	Site Description (English)	English description for the site	Yes
4.	Site Description (Chinese)	Chinese description for the site	No
5.	Site Address	Adress of the site	Yes for the first address line. No for the other 2 address line
6.	Site Representative	The name of the site representative	Yes
7.	Site Representative Contact No.	Contact phone number of the site representative	Yes
8.	Site Contact No.	Contact Phone number of the site	Yes
9.	Site Status	Status of the site (i.e. Active or inactive)	Yes

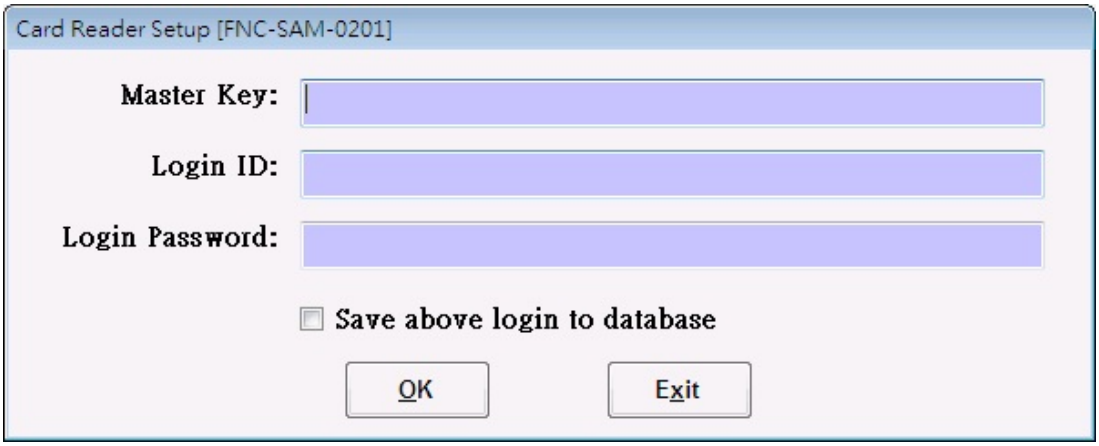
- Click Save button to save the record.
- The Grid at the top of the screen shows the available site of the system. Double click on a chosen record to retrieve the record.
- After retrieval, user may click the Edit button to edit the record.
- Click on the Delete button will delete the current record.
- Click on the Cancel button will cancel the changes made.
- Click on the Exit button will exit the program without save.

3.2.4.4 Worker Maintenance

- Click the menu items: ***Worker Management → Worker Maintenance***



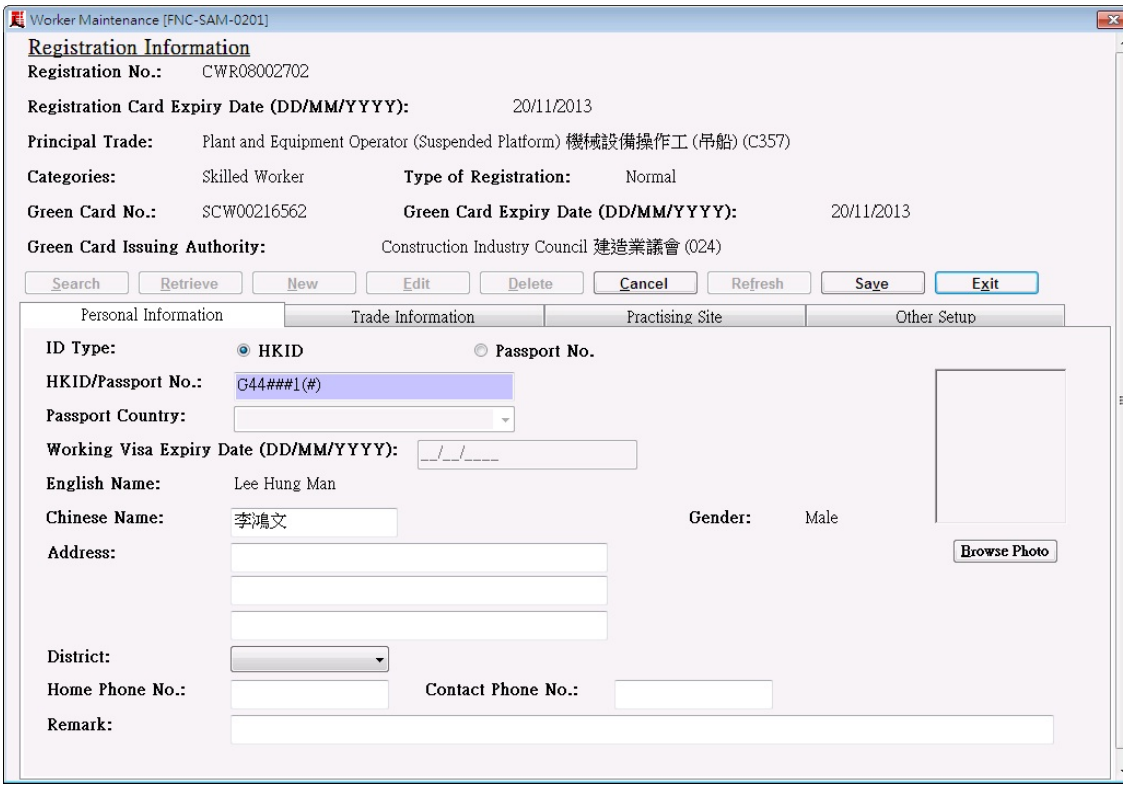
- This program allows user to authenticate the worker registration card, retrieve the card's data and stored in the system's database.
- To read data from a worker registration card, a valid Secure Authentication Module (SAM) card must be inserted into the SAM slot reader.
- Click the New button and place the worker registration card on the contact-less reader.
- Click Refresh Card button. If this is the first read by the program, user must login the SAM card using the authentication details provided by CWRA for the corresponding SAM Card. Below is an example of the screen:



- Enters the login credential for the SAM card and click OK to proceed. The "Save above login to database" checkbox function has been enabled for the default admin account. User may check the checkbox. After system's verification of the login information, it

would save it to the system's database and future calls on the function would use the saved login information for the login of the SAM card.

- The program will validate the SAM card login credentials and if correct, it will read the worker registration card details into the program as shown in below screen:



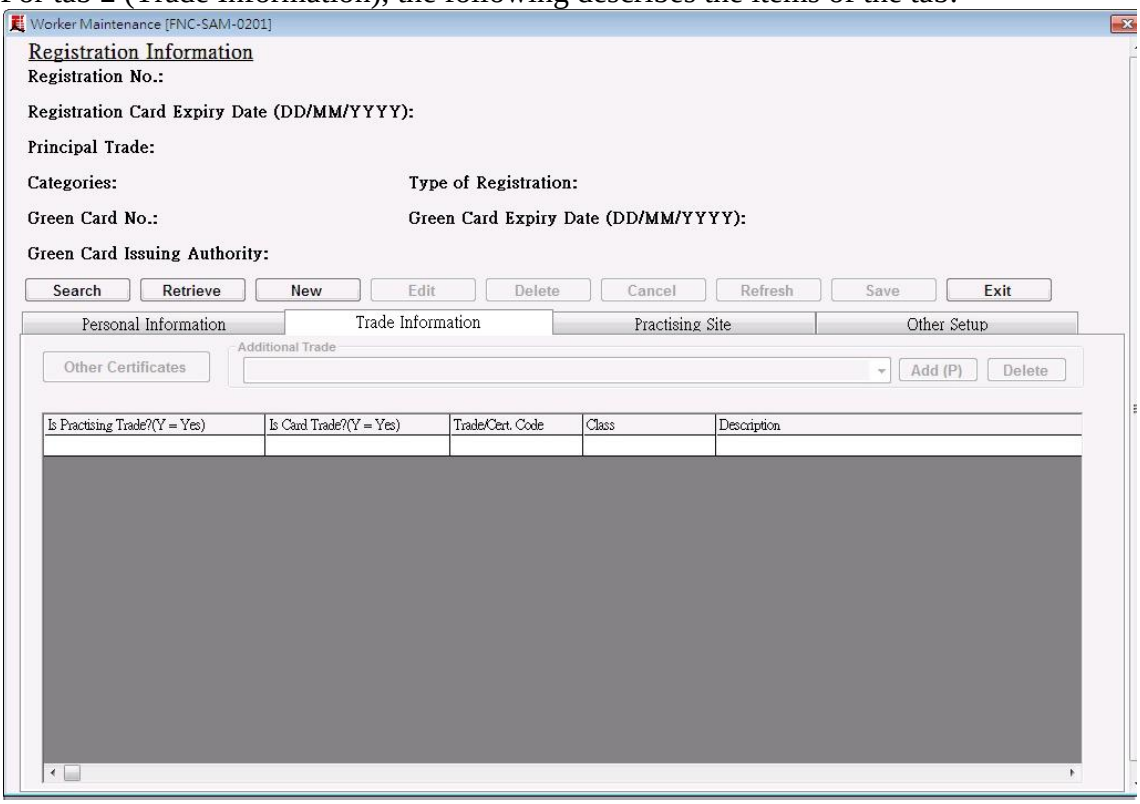
- There are 4 tabs of information where user may edit.
- For tab 1 (Personal Information), the following describes the items of the tab:

Item	Name	Description	Mandate field?	Remark
1.	ID Type	The type of the identification document	Yes	Choose either Hong Kong ID or Passport
2.	HKID/Passport No.:	The identification document number.	Yes	The number read from worker reg. card is masked. User need to amend it with the correct number.
3.	Passport Country	The issuing country of the passport.	No	Only required if the ID type is passport
4.	Working Visa Expiry Date	The working visa expiry date	No	
5.	English Name	English name of the worker	Yes	Read from worker card and non-editable
6.	Chinese Name	Chinese name of the worker	No	The Chinese Name is read from the worker

Item	Name	Description	Mandate field?	Remark
				card and is editable
7.	Gendar	Worker's gender	Yes	Read from worker card and non-editable
8.	Address	Worker home address	No	
9.	District	Worker home address's district	No	
10.	Home Phone No.	Worker home phone number	No	
11.	Contact Phone No.	Worker contact phone number	No	
12.	Remark	User remark	No	

Beside the above field, there is the Browse Photo button which allows the user to upload and save the photo of the worker in the system's directory.

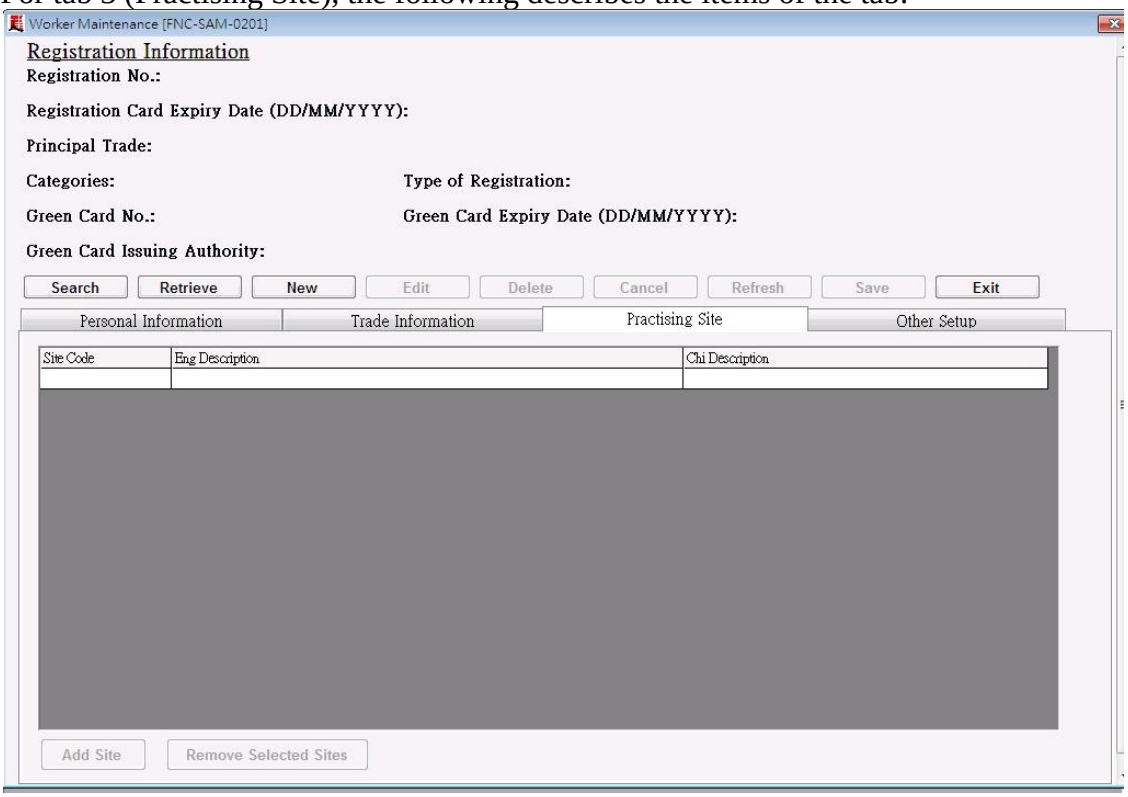
➢ For tab 2 (Trade Information), the following describes the items of the tab:



- The Grid lists out the certified trades of the worker as read from the worker registration card.
- User needs to assign one of the trades as the practising trade of the worker in the site. User need to double-click on the "Is Practising Trade" cell of the corresponding trade to mark it as the Practising Trade (i.e. the value Y displays).
- However, if the worker is working for other trades in the site which he/she has not been certified, an additional trade may be set as the practising trade. User need to click the additional trade list box and choose for the additional trade and click the Add button to add to the trade list. Added additional trade may be deleted from the trade list by clicking the Delete button of the Additional Trade.

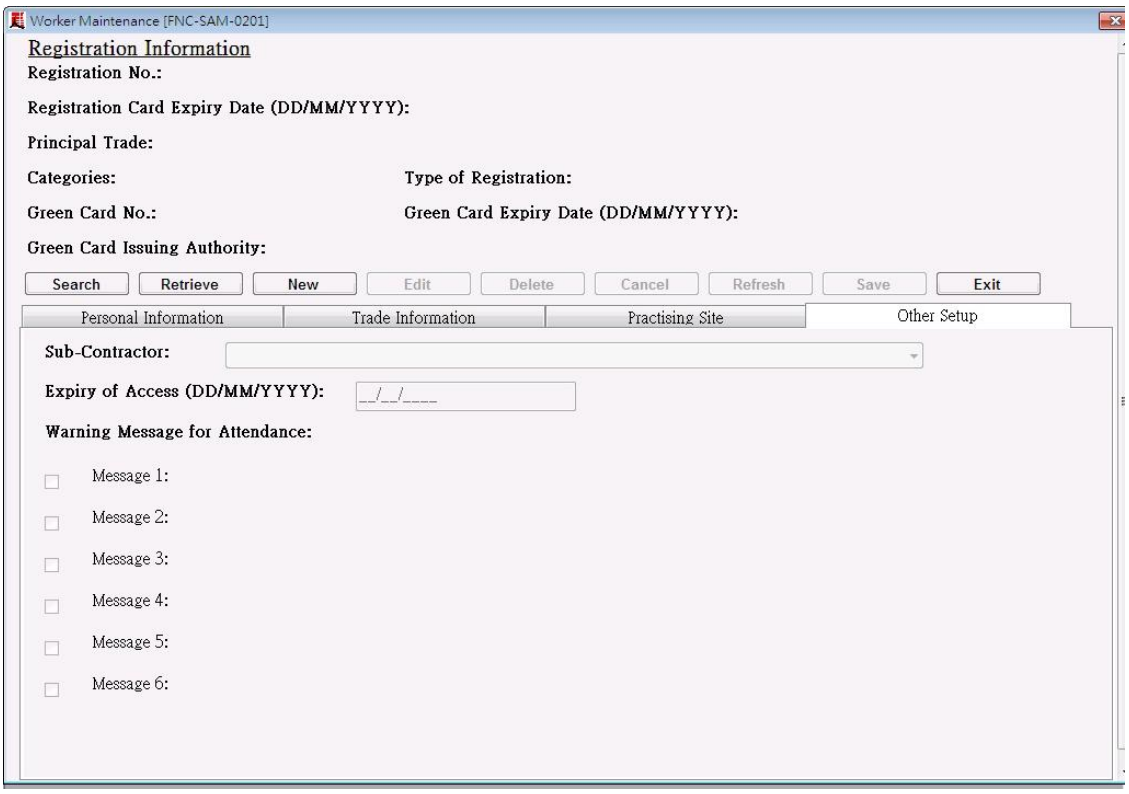
- The additional trade must be set as the practising trade and the “Is Card Trade” value is “N” to indicate that this is an additional trade.
- The button Other Certificates is simply allows user to save any other certification information which the worker possesses to the system for reference.

➢ For tab 3 (Practising Site), the following describes the items of the tab:



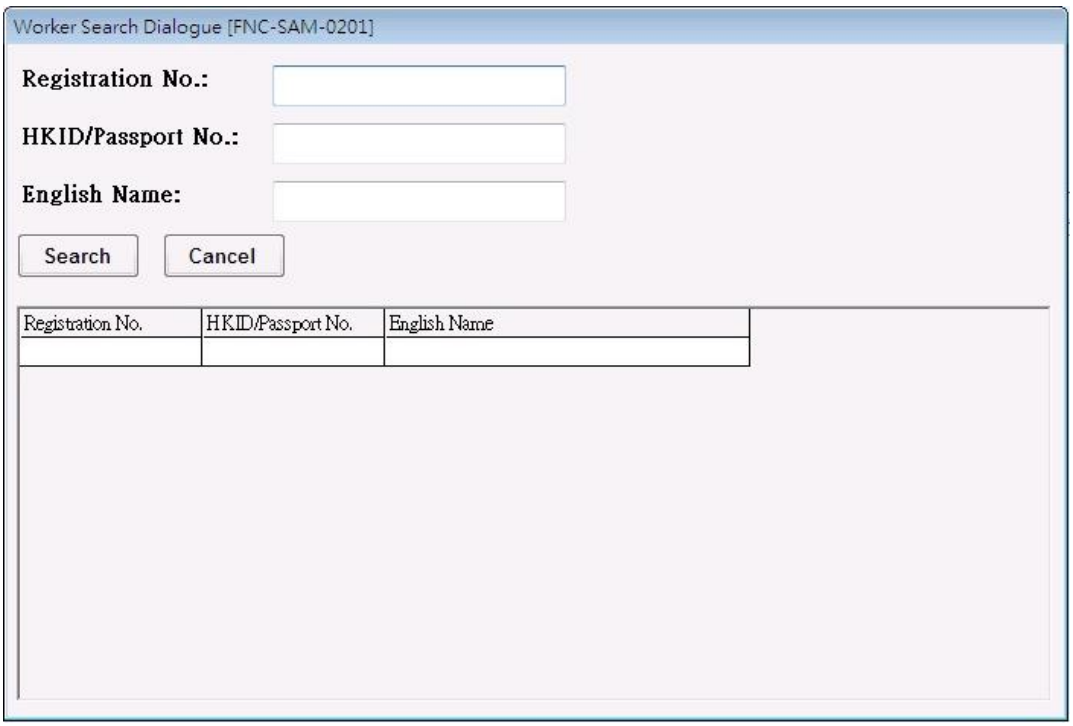
- Click the Add Site button to assign the worker to the site.
- Click the Remove Selected Sites button to remove the worker from the site.

➢ For tab 4 (Other Setup), the following describes the items of the tab:



- Click the Sub-Contractor list box to assign the worker to a sub-contractor which he/she belongs.
- Enters a expiry date for the Expiry of Access field so that it places an expiry date on which the worker may enters his/hers assigned site.
- The field Warning Message for Attendance has six choices which the user may assign to the worker. The six messages may be maintained in the Contractor Customize Option under the Master Maintenance menu. The assigned messages will be used to display during attendance taking by the SATM (Attendance Capturing Module – PC version)

➢ Click the Save button to save all the data entered in the tabs to the system.
➢ To search for an existing record in the system, click the Search button. The below search form will be displayed:



- Click Search to search for the worker that meets the searching criteria. Double click on the selected worker in the list to retrieve the worker's data for view/edit etc.
- Beside the Search button, user may use the Retrieve button to search for a user. The Retrieve button will allow the user to search for the record in the system based on the serial number read by the reader. Therefore, the valid worker registration card must be placed on the reader when using this function.
- Click the Edit button to set the retrieved record in edit mode for editing.
- The Delete button deletes the selected record.
- The Cancel button cancels the changes.
- The Exit button exits the program without changes.

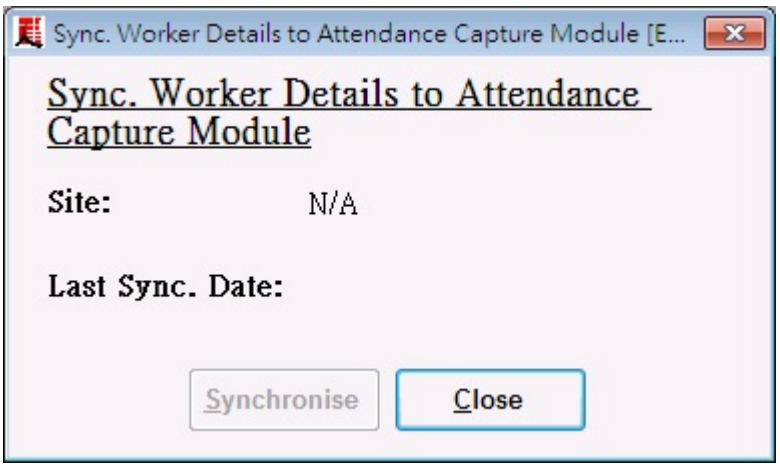
3.2.5 Export Access Control List & Worker Registration Record

If the both modules (Worker Registration & Attendance Capture) of SATM are installed in the same machine as illustrated in this example, user can use the function "Sync. Worker Details to Attendance Capture Module (Same Machine)" mentioned in section ***3.2.5.1*** to synchronise the worker detail data to the Attendance Capture Module.

However, if the Attendance Capture Module is installed in a separate machine, user should use the function mentioned in section ***3.2.5.2*** & ***3.2.5.3*** to export the worker details and then import the exported data to the Attendance Capture Module.

3.2.5.1 Sync. Worker Details to Attendance Capture Module (Same Machine)

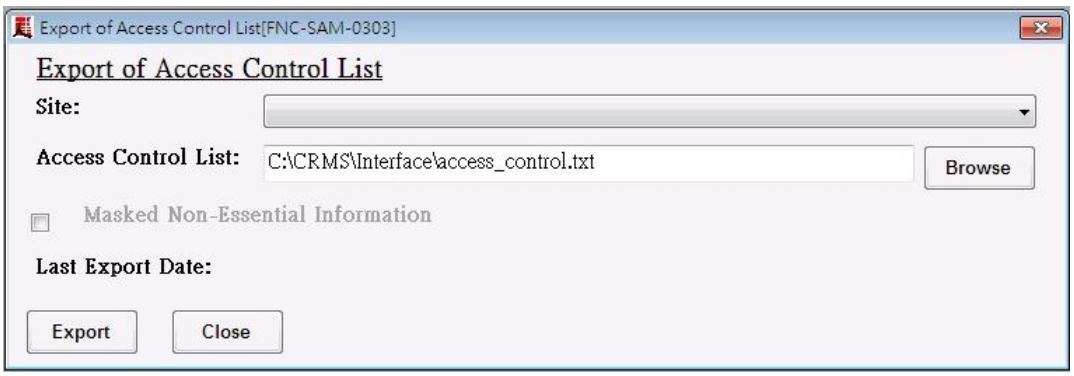
- Click the menu items: ***Interface → Export → Basic → Sync. Worker Details to Attendance Capture Module (Same Machine)***



- The function would synchronise the worker details' data from the Worker Registration Module to the Attendance Capture Module.
- Click Synchronise button to proceed the synchronisation of data.
- Click Close to exit the function.

3.2.5.2 Export of Access Control List

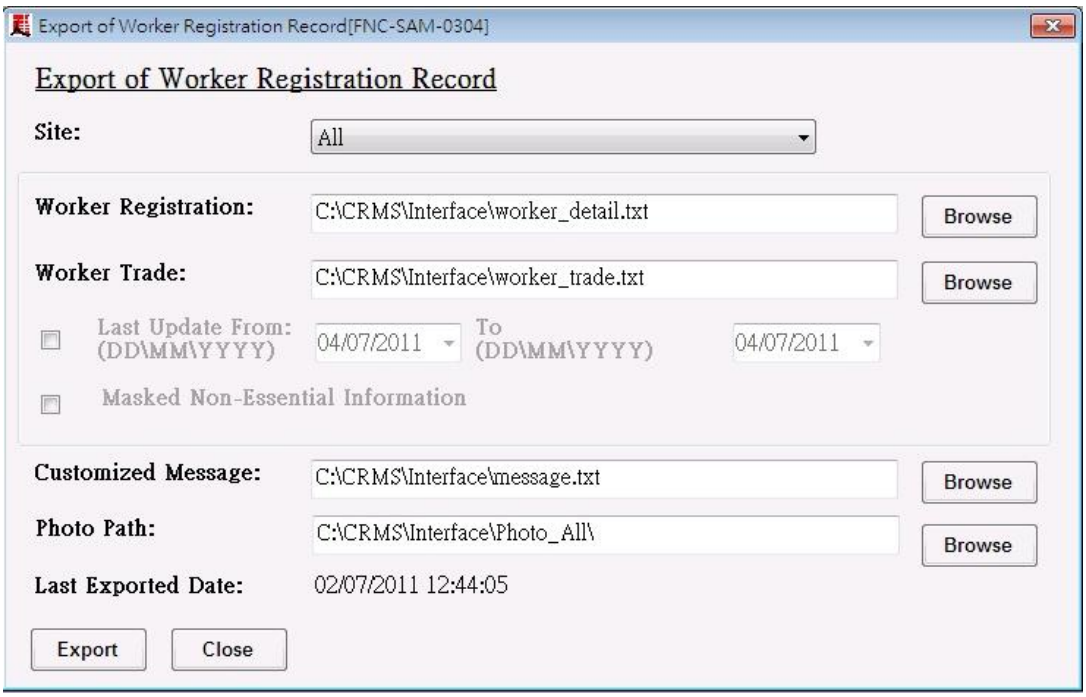
- Click the menu items: ***Interface → Export → Advance → Export of Access Control List***



- The function would export the Access Control List to a target file which can be used to import to the Attendance Capture Module of the relevant site.
- Choose the Site from the list box and click the Export button to export the access control list to the target file as indicated by the field Access Control List.
- User may use the Browse button to direct the Access Control List to another directory.
- When we checked "Masked Non-Esential Information", non-esential information for the taking of Attendance records e.g. HKID are masked as "X".
- Click Close to exit the program.

3.2.5.3 Export of Worker Registration Records

- Click the menu items: ***Interface → Export → Advance → Export of Worker Registration Records***



- The function would export the Worker Registration data and other details to target files which can be used to import to the Attendance Capture Module of the relevant site.
- To export the worker registration records for a particular site, choose it from the Site list box.
- There are four files that will be exported by this functions. These are Worker Registration, Worker Trade, Customized Message, and Photo Path.
- The Worker Registration file contains the registration record of each worker for the selected site.
- The Worker Trade file contrains the trade record of each worker for the selected site.
- The Customized Message file contains the customized messages reference tables of the system.
- The Photo Path file contains the directory which should contain the workers corresponding photo is store and it will be used by the SATM Attendance Capturing Module. This module will look at the given path for the worker's photo to display. Therefore, user has to ensure that the corresponding photos are copied to the designated path.
- The criteria Last Update From/To is used to allow user to select the worker details based on the date range. Check the checkbox and enters the desired date range for enabling this criteria.
- The Browse buttons are to allow user to select other directories.
- Click the Export button to export the files
- When we checked "Masked Non-Esential Information", non-esential information for the taking of Attendance records e.g. HKID , Passport, DOB, gender, contract phone no, home phone number and address are masked as "X.
- Click the Close button to exit the program.

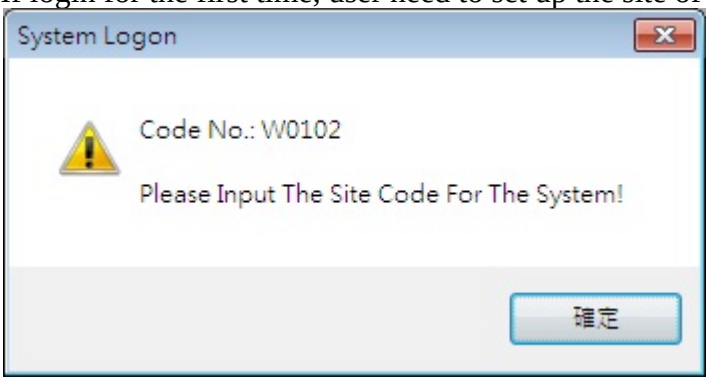
3.3 SATM Functions - Flow 2: Site Attendance Taking (Attendance Capture Module)

3.3.1 Login Attendance Capture Module

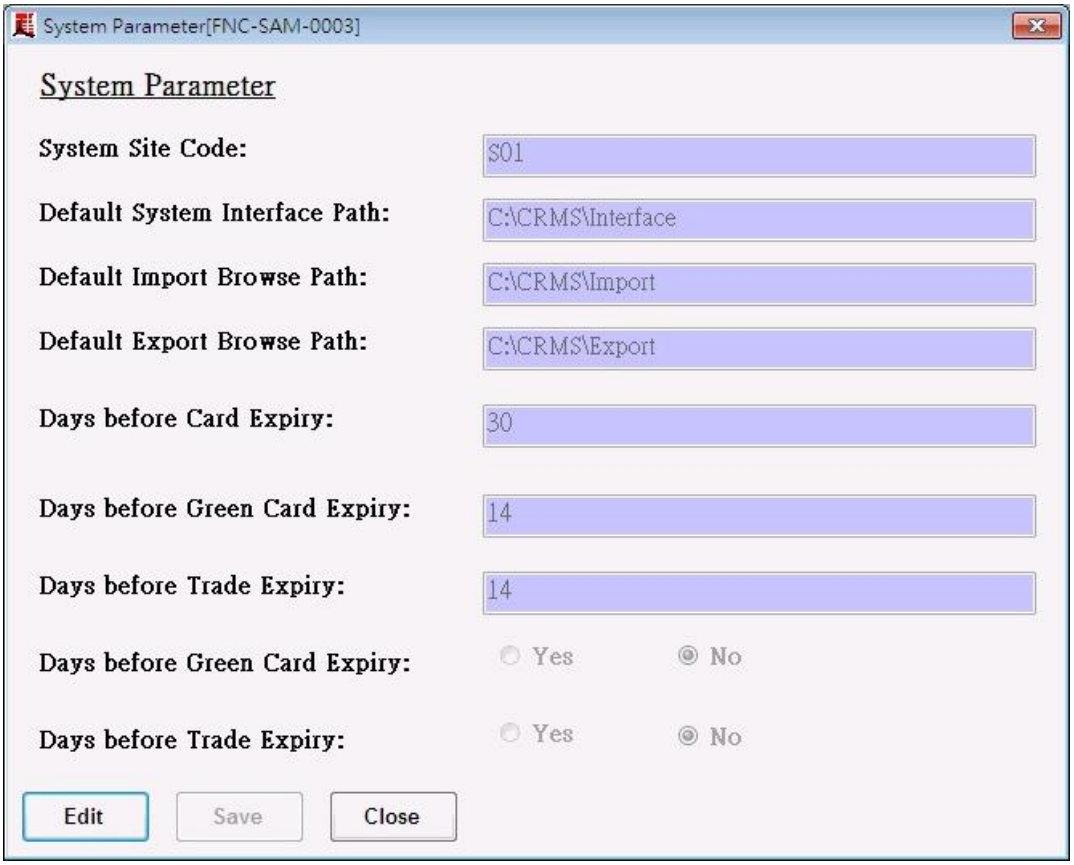
- Double click on “CRMS-SATM” icon on the Desktop

- The Login screen displays. Choose the Attendance Capture Module
- Select the “Language” of the system. Note, there are no need for the Login ID and Password for the Attendance Capture System.
- Click Login button to login.
- The program ONLY allows to logon once at the same time.

- If login for the first time, user need to set up the site of the Attendance Capture Module



- Update the site code as setup in the Worker Registration Module (Site Information) to the system



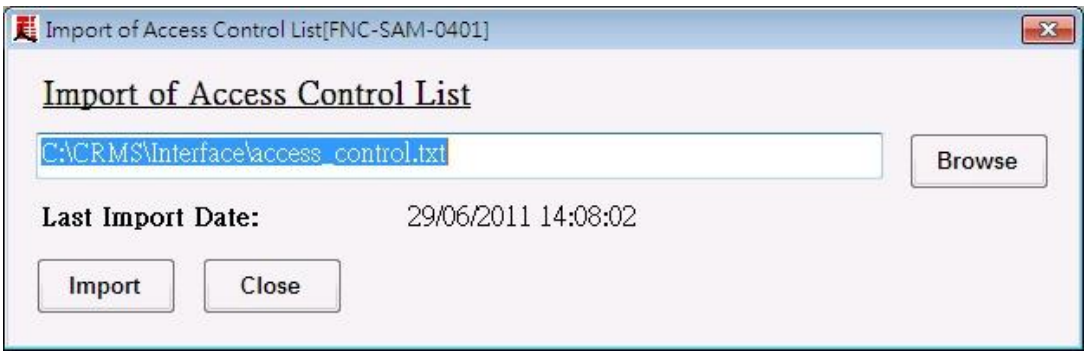
3.3.2 Import Worker Access Control Data

If the both modules (Worker Registration & Attendance Capture) of SATM are installed in the same machine as illustrated in this example, the Import of Worker Access Control Data had already been performed when user carried out the function "Sync. Worker Details to Attendance Capture Module (Same Machine)" mentioned in section ***3.2.5.1***. Therefore, there is no need to perform the following section **3.3.2.1** & **3.3.2.2**

However, if the Attendance Capture Module is installed in a separate machine, user should use the function mentioned in section ***3.3.2.1*** & ***3.3.2.2 to*** import the Worker Access Control Data exported from Worker Registration Module to the Attendance Capture Module.

3.3.2.1 Import of Access Control

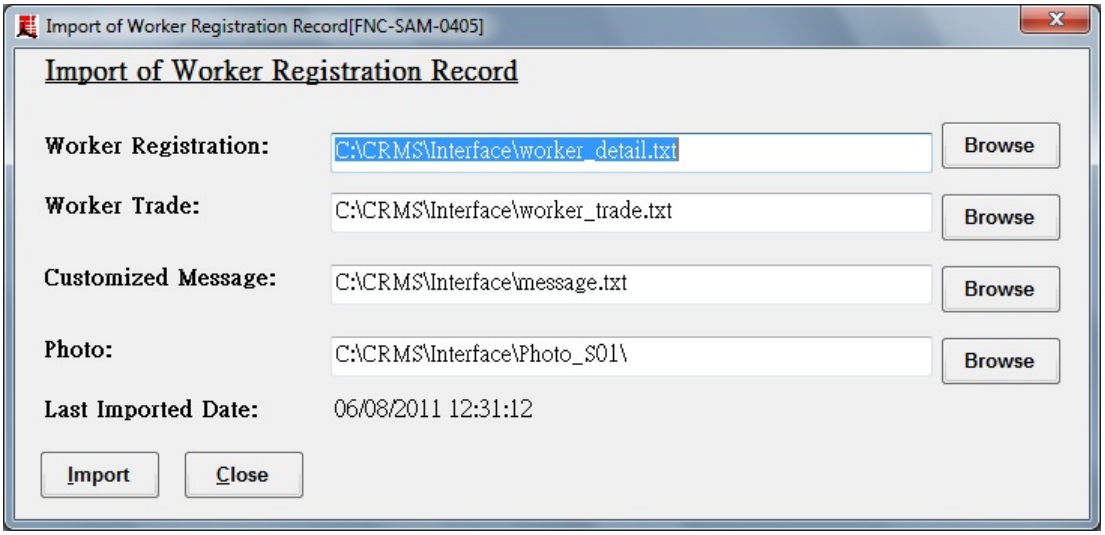
- Click the menu items: ***Interface → Import → General → Import of Access Control***



- Ensure that the Access Control file exported from the SATM – Worker Registration Module exits in the directory. User may use the Browse button to change to other path.
- Click Import button to import the file's data to the system.
- Click Close button to exit the program

3.3.2.2 Import of Worker Registration Record

- Click the menu items: ***Interface → Import → General → Import of Worker Registration Records***

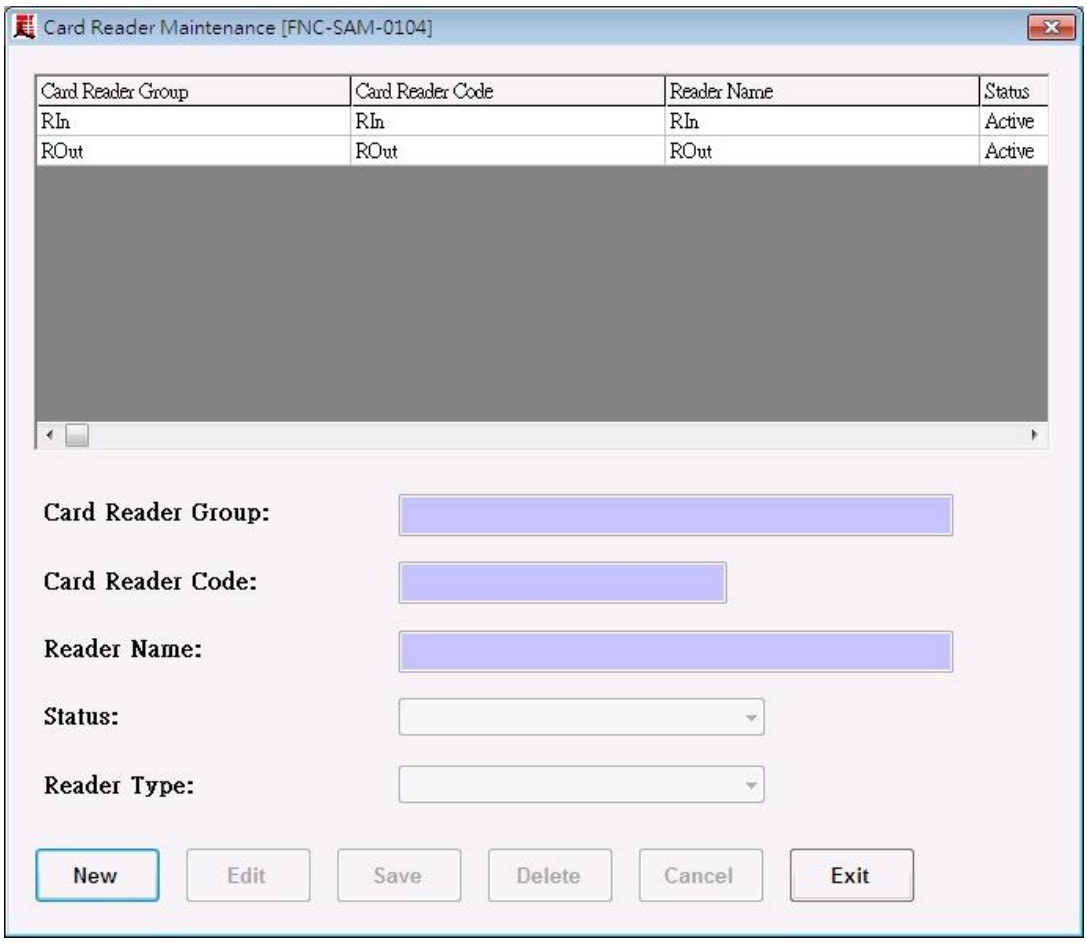


- Ensure that the Worker Registration, Worker Trade, Customized Message, Photo files exported from the SATM – Worker Registration Module exist in the directory. User may use the Browse button to change to other path.
- Click Import button to import the contents of these files to the system.
- Click Close button to exit the program.

3.3.3 Reader Set Up & Attendance Capturing

3.3.3.1 Card Reader Information

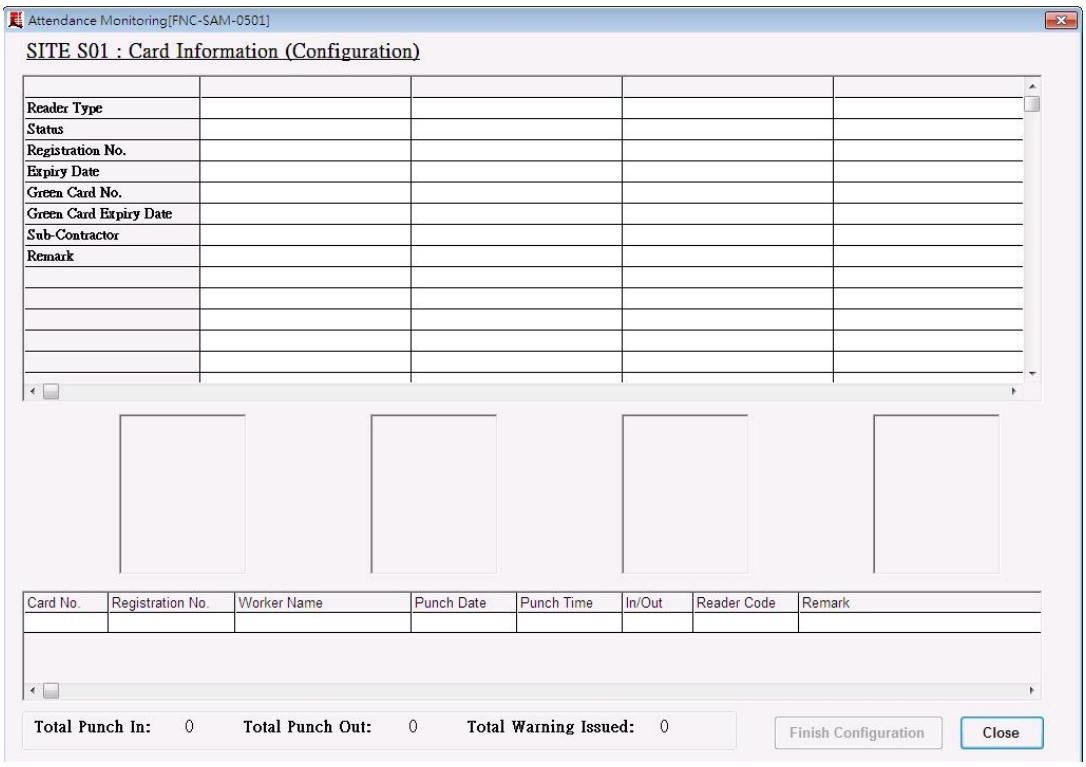
- Click the menu items: ***Master Maintenance → Card Reader Information***



- The program allows user to define the reader with a specific type (i.e. In or Out reader).
- Click New button to add a new reader record. Enters the Card Reader Group, Card Reader Code (user assigned), Reader Name, Status and Reader Type (In or Out).
- Click Save to save the record.
- The Grid shows all the reader definition saved in the system.
- Double click on a reader row in the list will select the record.
- Click Edit button will enble the selected record for amendments.
- Click Delete button to delete the record.
- Click Cancel button to cancel the changes.
- Click Exit button to exit the program.

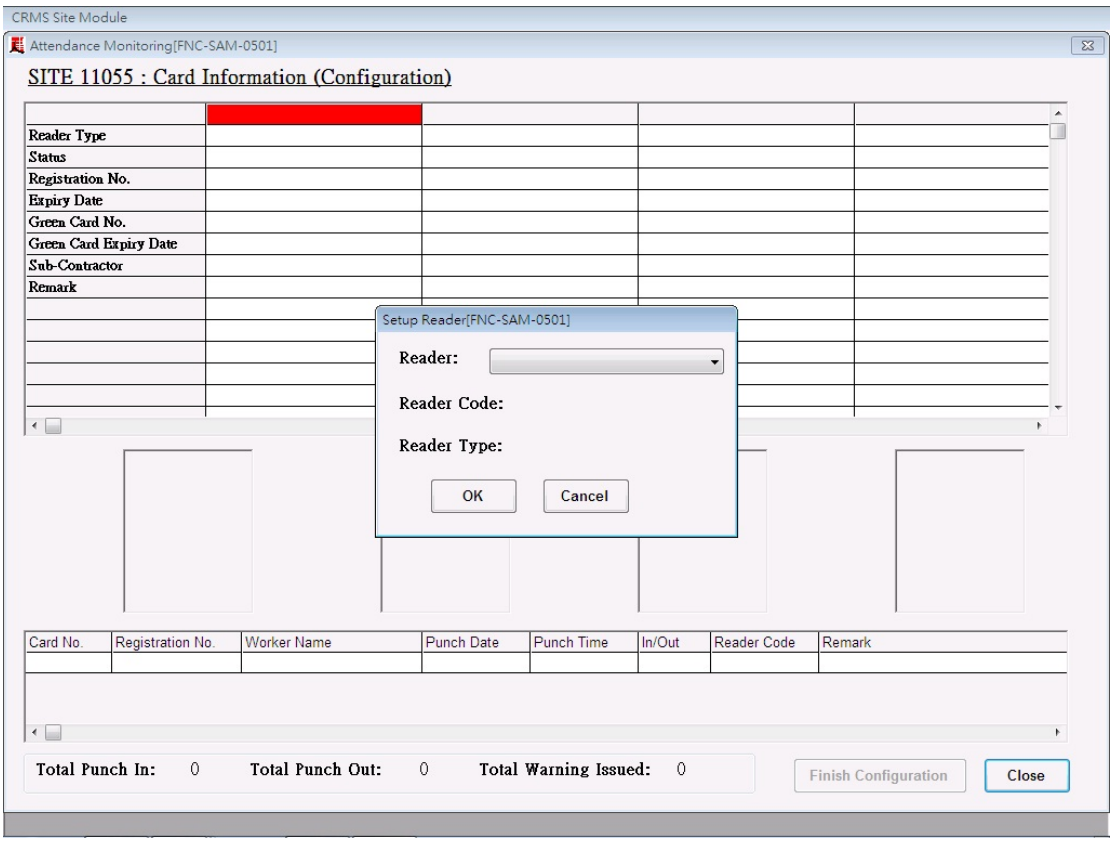
3.3.3.2 Attendance Capture

- Click the menu items: ***Worker Management → Attendance Capture***

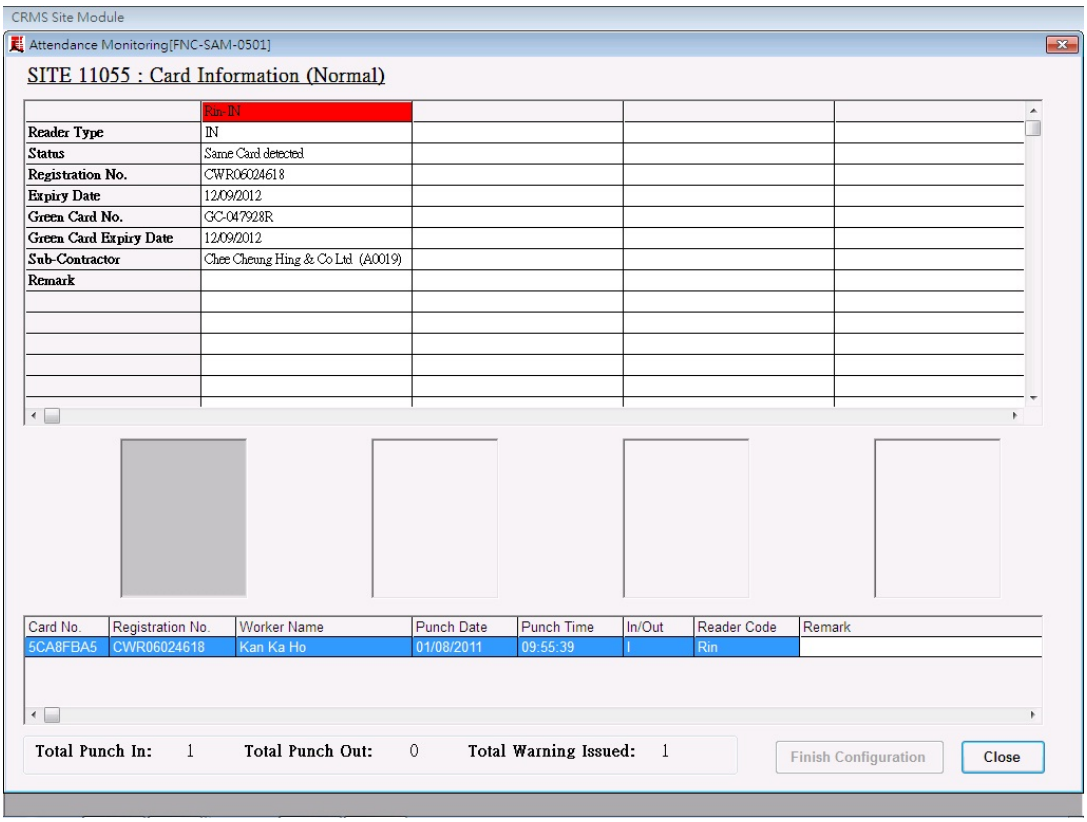


- This function allows registered worker to clock IN and OUT of the system using their Construction Worker Registration Card. Their access times would be recorded in the system.
- If no reader is connecting to the computer, the error message will display on the screen.

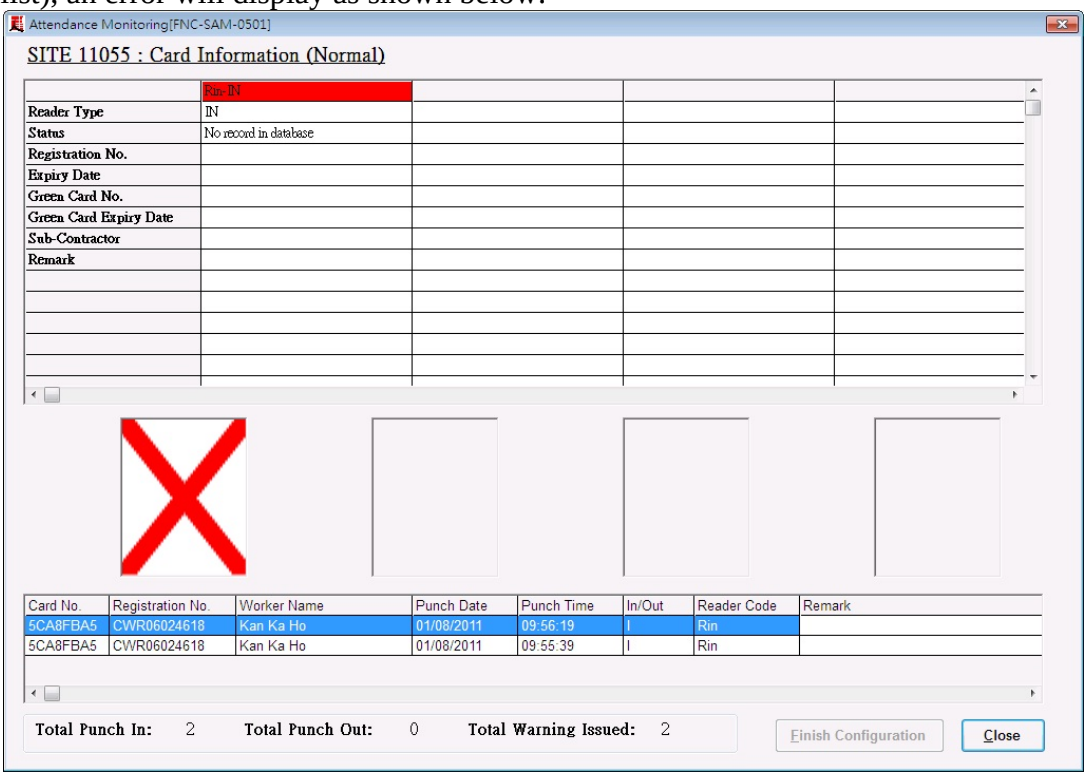
- If readers are connected, then the below screen displays. Place a valid worker registration card on the reader to be used as the IN reader.



- A reader setup dialogue appears. Choose the IN reader type and click OK. This setup will ensure that all subsequent card detected by this reader will assign as an IN attendance record.
- To setup an OUT reader, again carry the above step and choose the OUT reader.
- After all the available readers are setup, click the Finish Configuration button to accept the setup. Note, a maximum of 4 readers is allowed to be setup.
- After the readers are setup correctly, attendance capturing may begin.
- When worker arrives to work on the site, he/she may place the worker card on an IN reader. If the worker is registered for work in this site, the program will display his details and photo (if user has place the worker's photo in the photo directory) similar to that shown in below screen:



- However, if the worker is not allowed to work in the site (i.e. not in the access control list), an error will display as shown below:



- Recent attendance records are shown in the grid at the bottom of the program for user to reference.

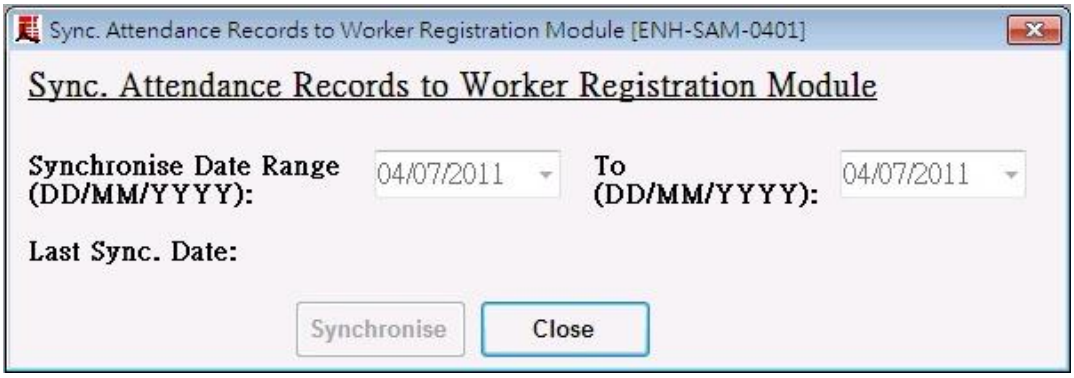
3.3.4 Export of Attendance Record

If the both modules (Worker Registration & Attendance Capture) of SATM are installed in the same machine as illustrated in this example, user can use the function "Sync. Attendance Records to Worker Registration Module (Same Machine)" mentioned in section ***3.3.4.1*** to synchronise the attendance records to the Worker Registration Module.

However, if the Worker Registration Module is installed in a separate machine, user should use the function mentioned in section ***3.3.4.2*** to export the attendance records and then import the exported data to the Worker Registration Module.

3.3.4.1 Sync. Attendance Records to Worker Registration Module (Same Machine)

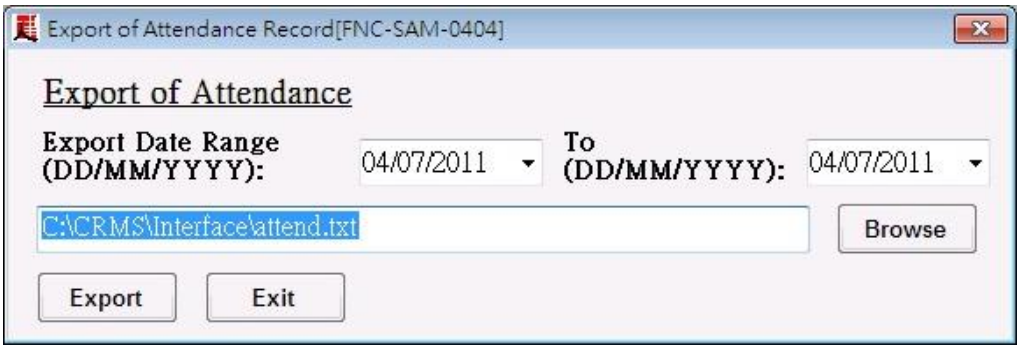
- Click the menu items: ***Interface → Export → Advance → Export Of Attendance Records***



- Select specific date range for synchronising the attendance records
- Click Synchronise button to synchronise the attendance records to the Worker Registration Module.
- Click Close button to exit the function.

3.3.4.2 Export of Attendance Record

- Click the menu items: ***Interface → Export → Advance → Export Of Attendance Records***



- The Synchronise Date Range is defaulted to system date. However, it may be changed to the desired period.
- The Browse button allow user to specify another path.

- Click the Export button to export the attendance record to the defined file.
- Click Exit to exit the program.

3.4 SATM Functions - Flow 3: Labour Return Generation and Submission (Worker Registration Module)

3.4.1 Login Worker Registration Module

Refer to Section 3.2.1 for the login process.

3.4.2 Import of Attendance Records

If the both modules (Worker Registration & Attendance Capture) of SATM are installed in the same machine as illustrated in this example, the Import of Attendance Records had already been performed when user carried out the function "Sync. Attendance Records to Worker Registration Module (Same Machine)" mentioned in section ***3.3.4.1***. Therefore, there is no need to perform the following section **3.3.2.1** & **3.3.2.2**

However, if the Attendance Capture Module is installed in a separate machine, user should use the function mentioned in section ***3.4.2*** to import the Attendance Records exported from Attendance Capture Module to the Worker Registration Module.

- Click the menu items: ***Interface → Import → General → Import of Attendance Records***

- Ensure that the attendance record file are located as inidcated in the field. Use the Browse button to locate another file.
- Click Import button to import the contents of the Attedance Record file into the system.
- Click Close to exit the program.

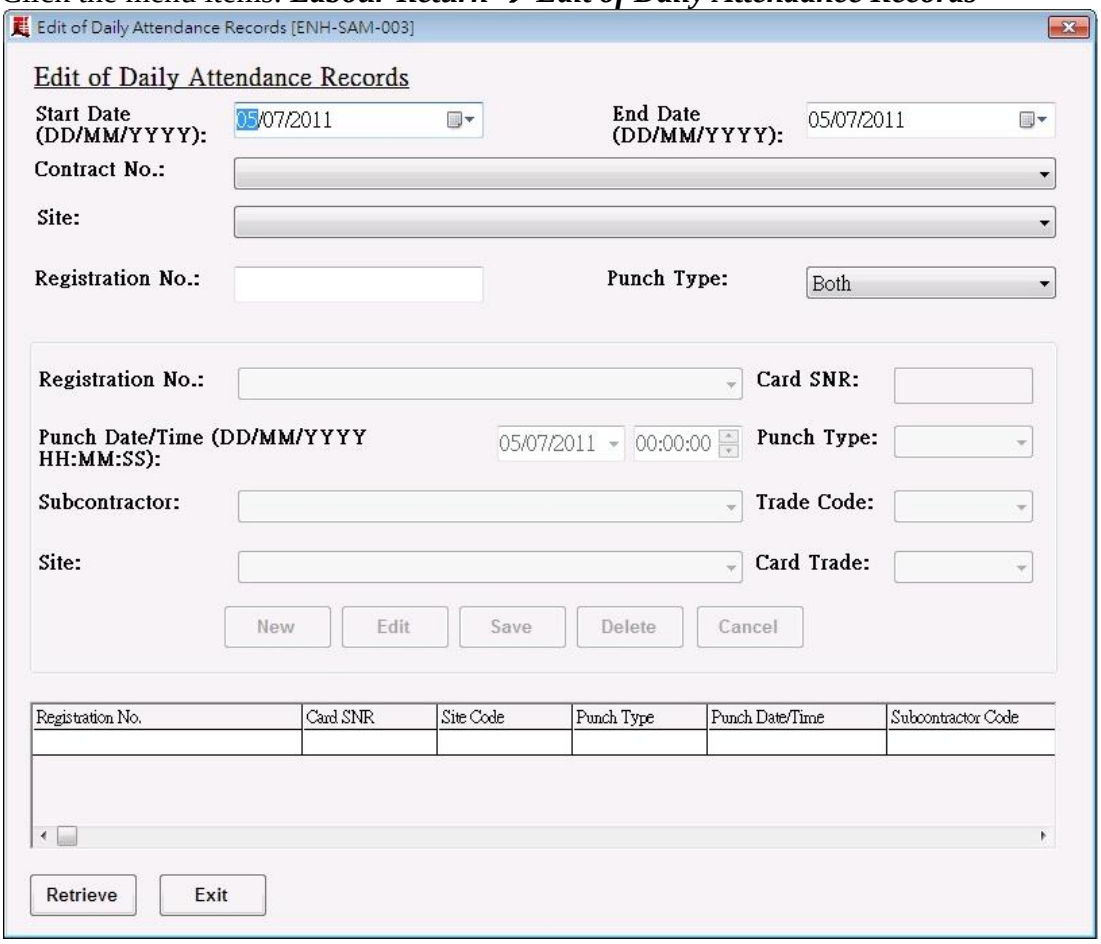
3.4.3 Generation & Submission of Labour Return

There are basically 4 Labour Returns available for generation by the system. The Labour Returns are: Daily Attendance Report (DAR); GF527; GF527A; Qualified Tradesman Report (QTR). The DAR is mandatory submission to CWRA by all construction contracts.

Other Labour Returns submission requirement would depend on the construction contract concerned.

3.4.3.1 Edit of Daily Attendance Records

- This program allows user to review the attendance records that had been imported from the Attendance Capture Module before the generation of the DAR for submission to CWRA. If there are any missing records, the system allows the user to add the missing attendance records (e.g. if there is an "IN" record but the worker forgot to check out, the user can add an "OUT" record for that worker). The manual added attendance records are shown in Yellow and can be later modified or deleted. However, all the system recorded records cannot be modified or deleted.
- Click the menu items: ***Labour Return → Edit of Daily Attendance Records***

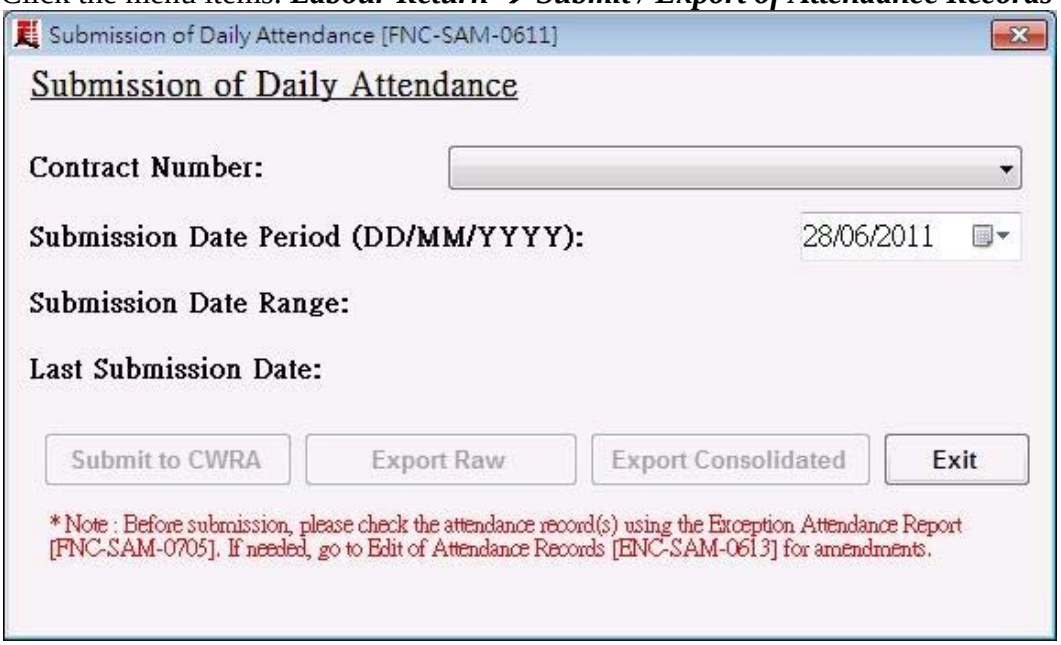


- The top part of the form consists of the searching criteria: Start Date; End Date; Contract No.; Site; Registration No.; Punch Type.
- Enter the desired searching criteria and click the Retrieve button to retrieve the relevant records. The selected records will be displayed in the Grid.
- To modify a selected manually added attendance record, just double-click on the resired record on the grid to load the record into the Update Attendance Record section (located in the middle of the screen). Click Edit to amend the values. The fields Registration No. and Punch Date/Time are not amendable but others may be changed. After changes, click Save button to save the changes.
- To add attendance record, user may click the New button at the Update Attendance Record section and fill in the details of the record.
- Click Save button to save the changes.

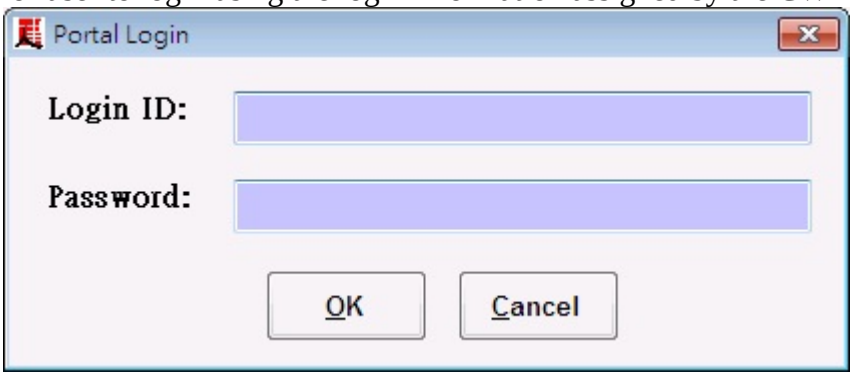
- Click Delete button to delete an Attendance Record. Note that only additional attendance record add by the function can be deleted. Those records recorded by the Attendance Capture Module cannot be deleted.
- Click Cancel button to cancel the changes.
- To exit the program, click the Exit button.

3.4.3.2 Submit / Export of Attendance Records

- Click the menu items: ***Labour Return → Submit / Export of Attendance Records***



- Choose the Contract Number from the list box.
- Choose the Submission Date Period. This Date is only use to determine the submission date range of the submission (as shown in the field Submission Date Range). This date ranged is determined by the Site Commencement Date field and Submission Weekday field in the Contract Information maintenance program (see section 3.2.4.1).
- If internet connection is available, user may click the Submit to CWRA button to submit the Daily Attendance Report (DAR) for the specified date range to CWRA. After clicking the submit button, a portal login screen will be display (as shown below) for user to login using the login information assigned by the CWRA.



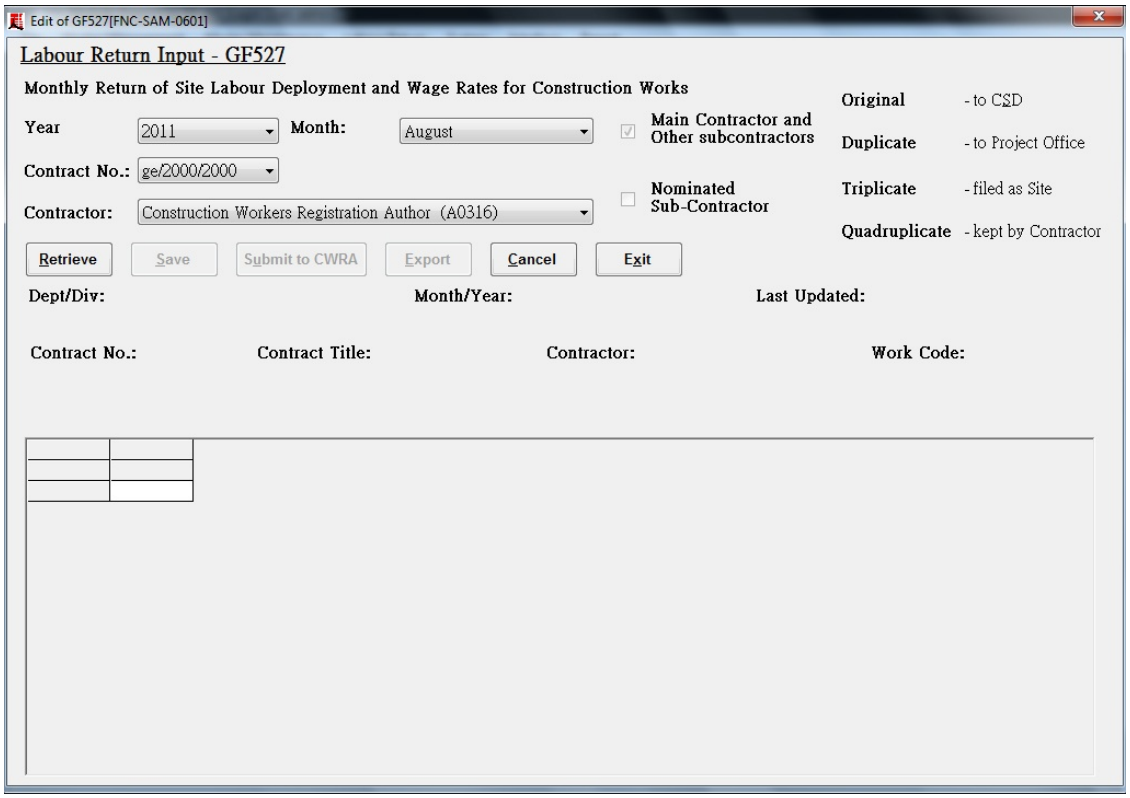
- However, if internet connection is not available, user may click the Export Raw and/or Export Consolidated button to export the DAR to Excel files. The Export Raw button will export those attendance records imported into the system from the Attendance Capture Module. The Export Consolidated button will export the raw records and the

records entered by the program Edit of Daily Attendance Records (see section 3.4.3.1). The exported file's name & path will be according to the convention as defined in Appendix G. The exported DAR files may be submitted to CWRA through the CWRA web portals using other internet enable PC. User may also keep the files for their reference. (see section 9.2)

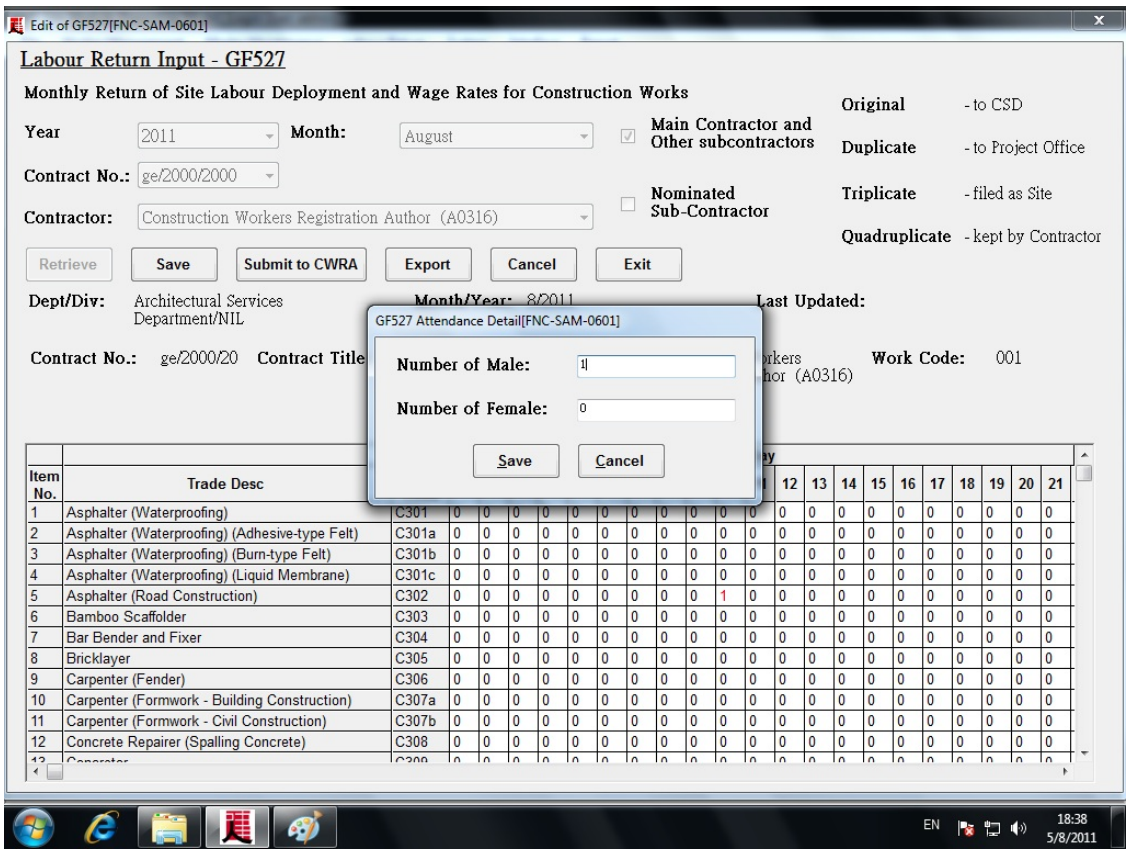
- Click the Exit button to exit the program.

3.4.3.3 GF527

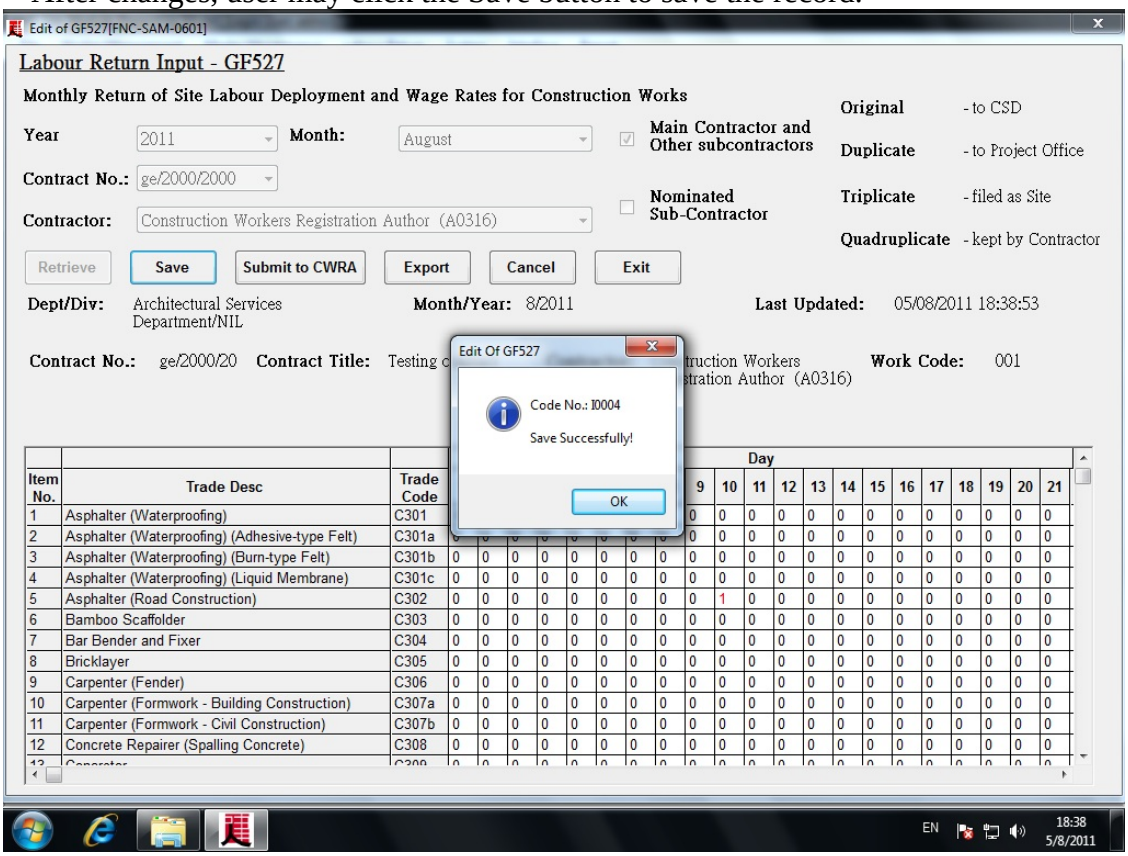
- Click the menu items: ***Labour Return → GF527***



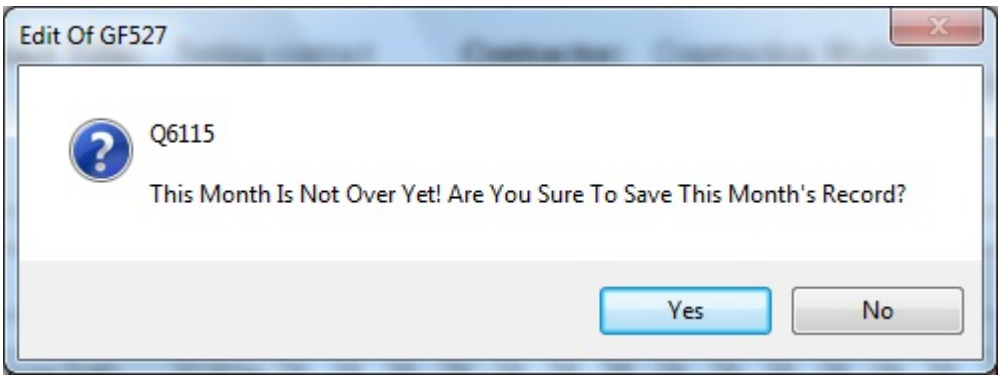
- User may enter the searching criteria: Year; Month; Contract No.; Contractor.
- After entering the searching criteria, click the Retrieve button to retrieve the relevant data to the grid below.
- The numeric fields in the grid represent the number of worker working for the corresponding trade. These values are generated by the attendance records stored in the system. However, user may edit these numbers to ensure that it reflects the actual value. To edit the values, click on the desired cell and a dialogue box will be display where user may enter the correct Male or Female number. Below shows an example of the screen:



- The changed items will be highlighted in red for easy reference.
- After changes, user may click the Save button to save the record.



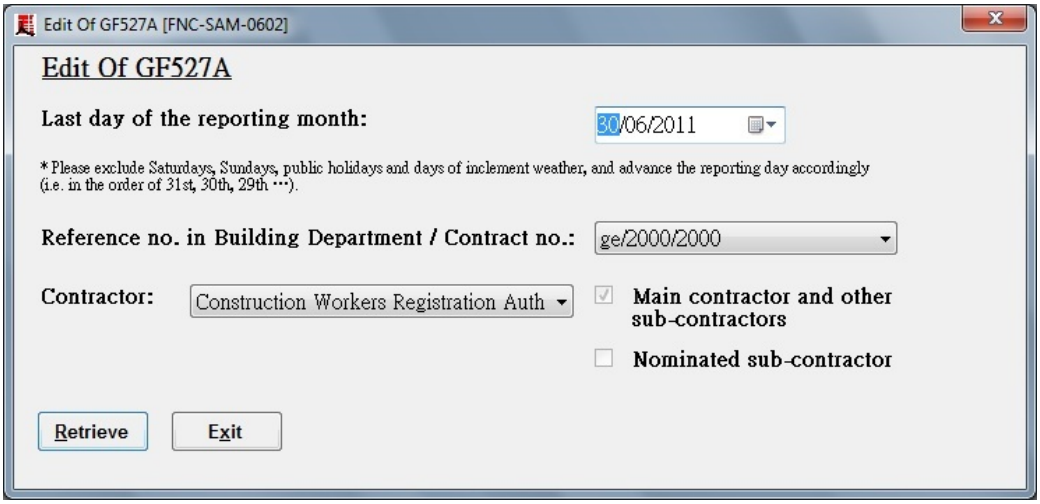
- Whenever user is going to save the month of GF527 that is not over yet (records for the current month), SATM will popup the confirmation message box on the screen to warn user. User may click Yes to save or No to cancel the action. Below shows an example screen:



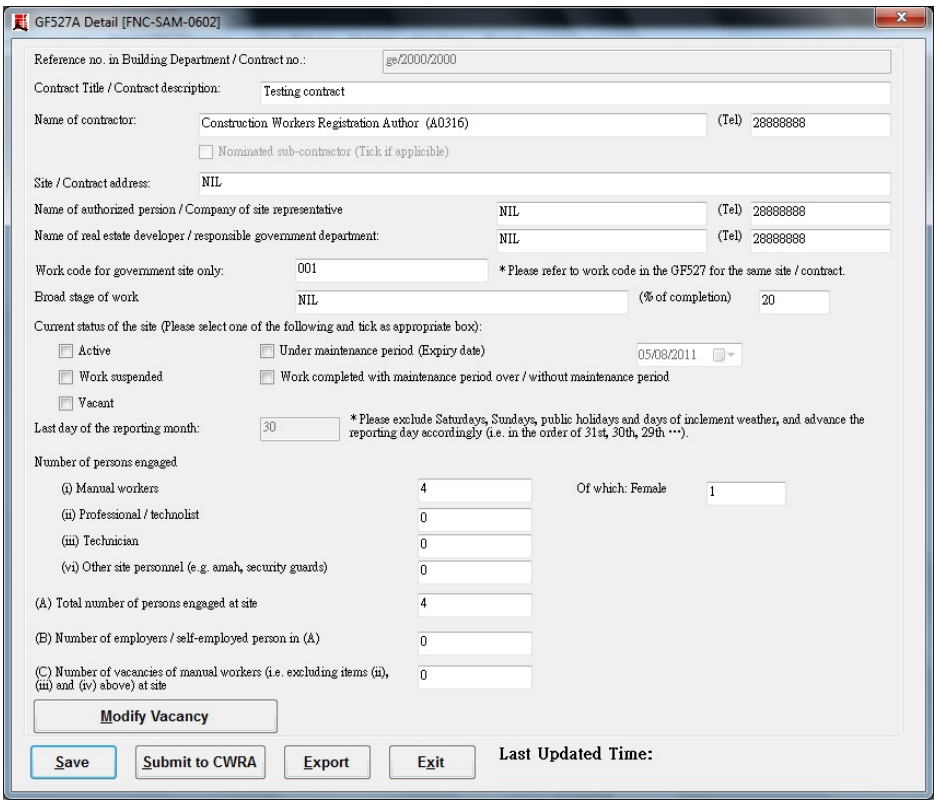
- For a completed GF527 and the system is internet accessible, user may click the Submit to CWRA button to directly submit the report to CWRA portal. User will need to login to the CWRA portal before submitting the report.
- However, if internet is not accessible, user may click the Export button to export the report to an Excel file which may be submitted to CWRA portal using other internet accessible machine. The exported file's name & path will be according to the convention as defined in Appendix G.
- The Cancel button resets the program.
- The Exit button exits the program.

3.4.3.4 GF527A

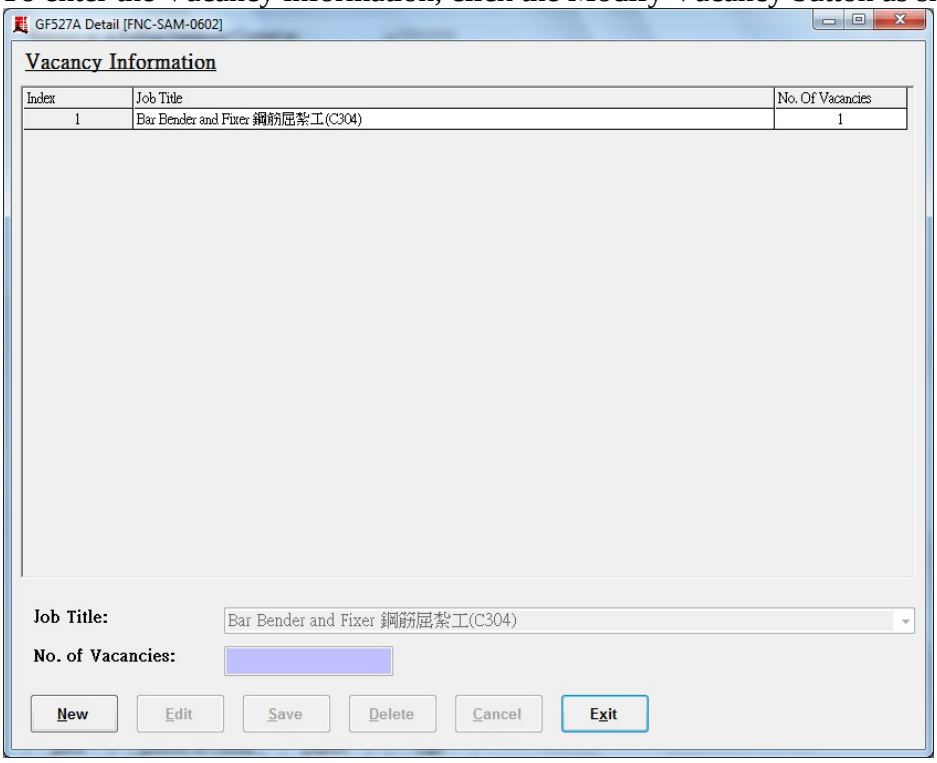
- Click the menu items: ***Labour Return → GF527A***



- Choose the criteria: Last day of the reporting month; Reference no. in Building Department / Contract no.; Contractor.
- Click Retreive button to retrieve the GF527A record. Below is an sample screen:

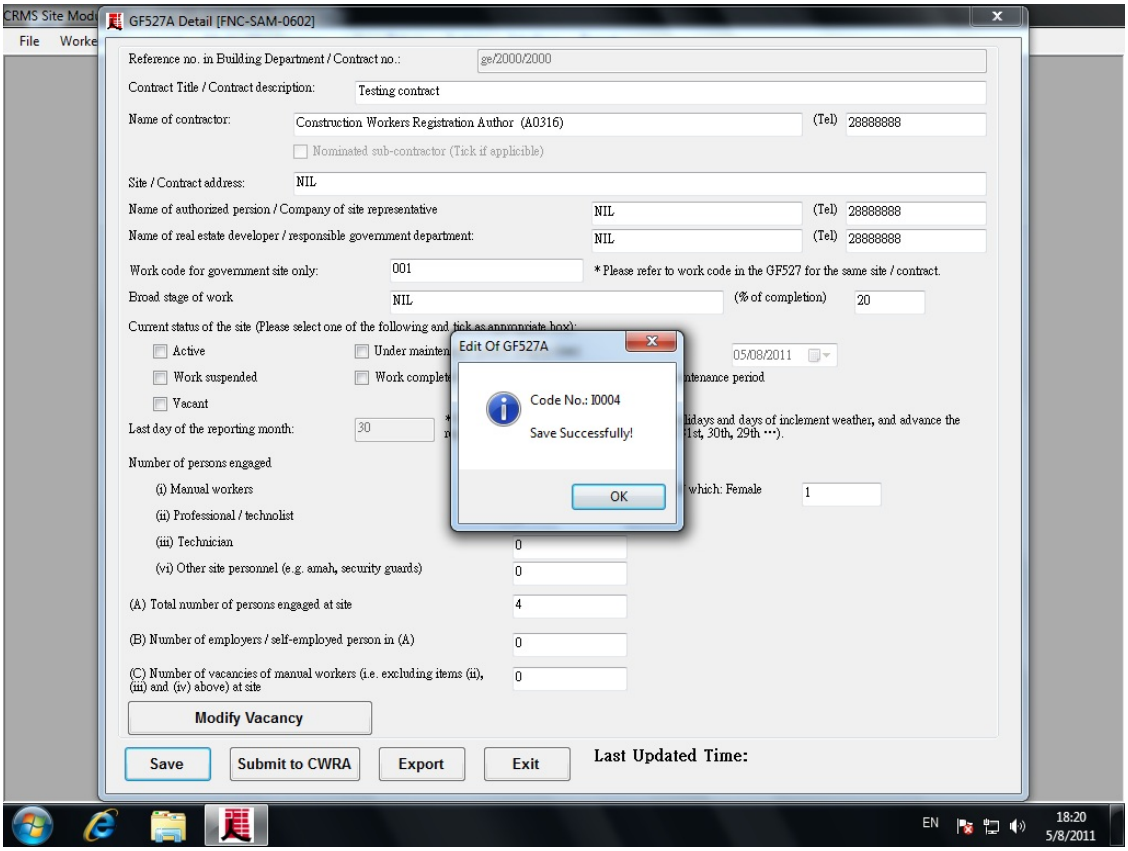


- For those fields that user had entered in the system, it will be pre-loaded on the form.
- User need to fill in the rest of the fields.
- To enter the Vacancy information, click the Modify Vacancy button as shown below:

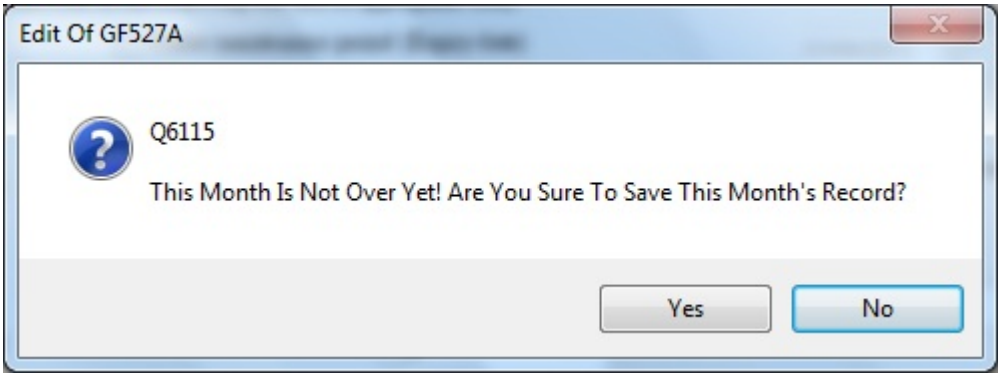


- User may add the vacancy information for the current GF527A using the buttons at the bottom of the form. To edit an existing record, just double click the chosen record in the list and click the Edit button to edit the record. Also, user may click the Delete button to delete the chosen record. When completed the entry, click Exit to return to the GF527A main form.

- After return to the main form, user may click the Save button to save the changes in this form and the Vacancy form. Below is an example of the saving screen:



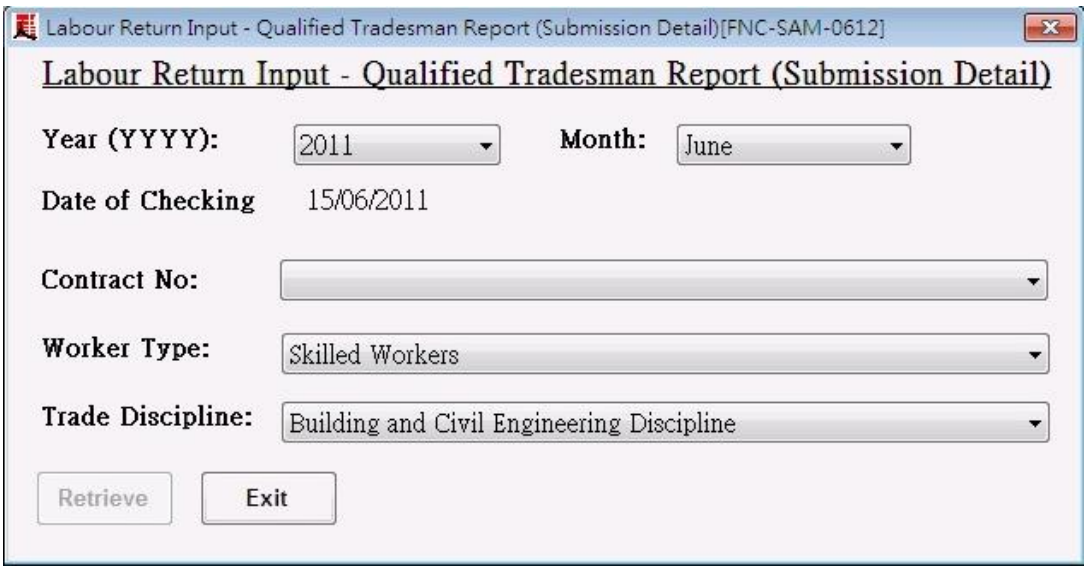
- Whenever user is going to save the month of GF527A is not over yet (records for the current month), SATM will popup the confirmation message box on the screen as shown below for user to confirm.



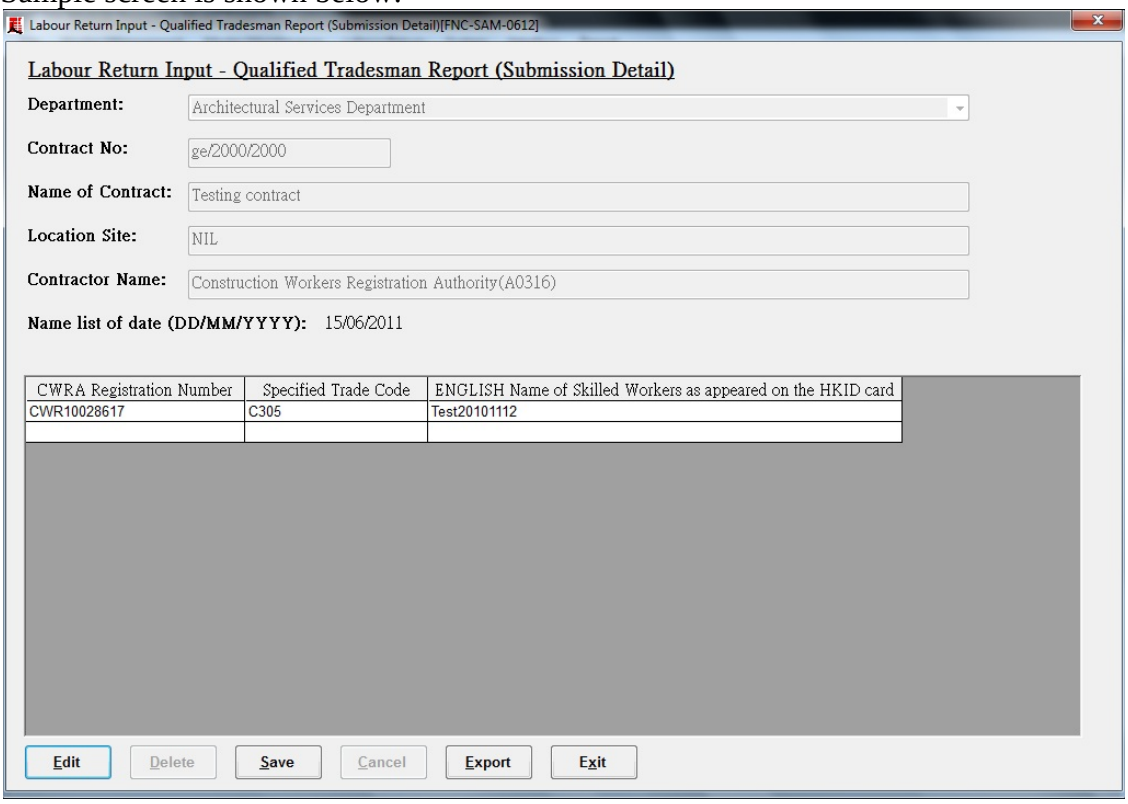
- To submit the form to CWRA, simply click the Submit to CWRA button. Provided that internet connection is available, the system will prompt the CWRA portal login form for user to enter the login credential before uploading the GF527A.
- If internet connection is not available, user may click the Export button to export the GF527A to Excel file and submitted to CWRA portal through other internet accessible machine. The exported file's name & path will be according to the convention as defined in Appendix G. (see section 9.2)
- Click the Exit button to exit the program.

3.4.3.5 Qualified Tradesman Report (Submission Details)

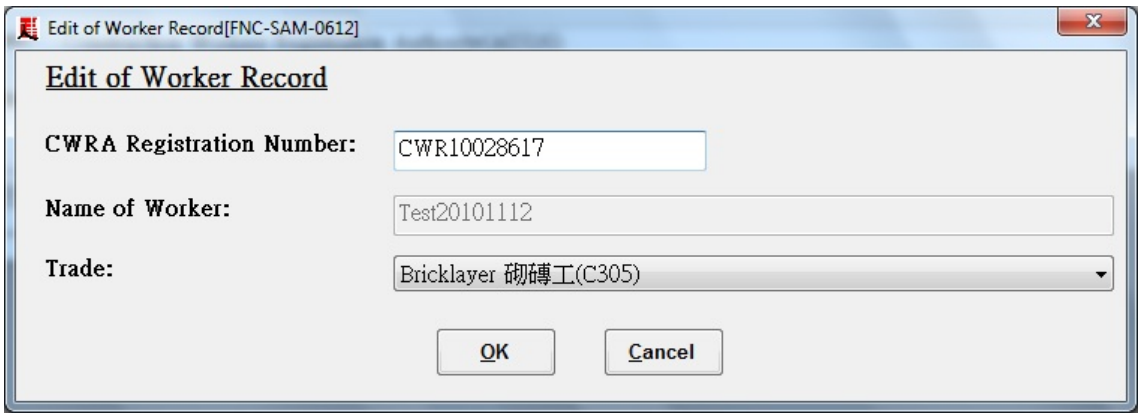
- Click the menu items: ***Labour Return → Qualified Tradesman Report → Submission Details***



- Choose the desired Year, Month, Contract No., Worker Type and Trade Discipline. There are basically 2 Worker Types (Skilled and Semi-Skilled Workers) and 2 Trade Disciplines (Building & Civil Engineering AND Electrical & Mechanical Engineering).
- After entering the chosen QTR details, click the Retrieve button to retrieve the record. Sample screen is shown below:



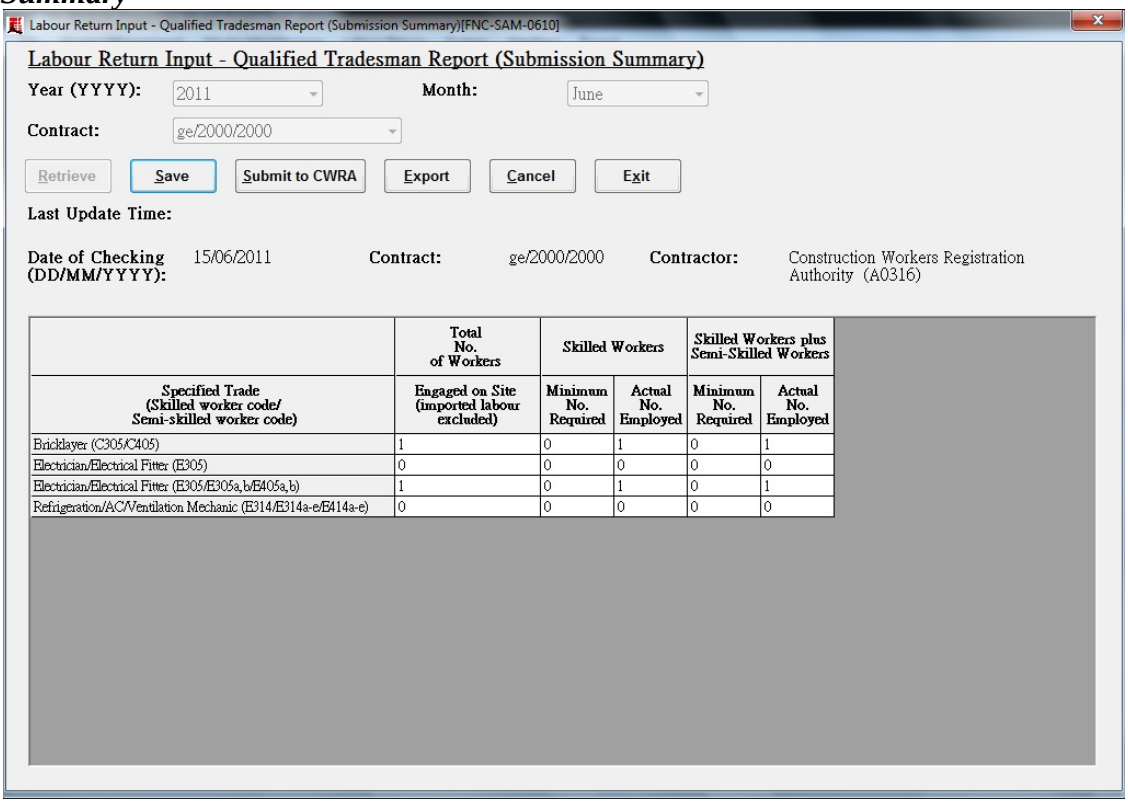
- Click the Edit button to edit the form. User then can click on an existing record to edit the contents of the worker. However, to add a new worker record, user can click on the empty row on the grid and a popup screen as shown above will allow user to enter the worker details. Click OK to add the worker.



- Click the Save button to save the contents of the form.
- User may click the Delete button to delete a worker record.
- The Cancel button cancel the changes.
- The Export button allows the user to export the content of the forms to Excel files for submission to CWRA portal through other internet accessible machines. The exported file's name & path will be according to the convention as defined in Appendix G.
- The Exit button exits the program.
- Note, for other trade diciplines that are relevant to the contract, user can repeat the above processs to generate the QTR details for them.

3.4.3.6 Qualified Tradesman Report (Submission Summary)

- After the user had generated and saved all the relevant QTR (Submission Details) records, the user may generate and save the QTR (Submission Summary) based on the submission details.
- Click the menu items: ***Labour Return → Qualified Tradesman Report → Submission Summary***

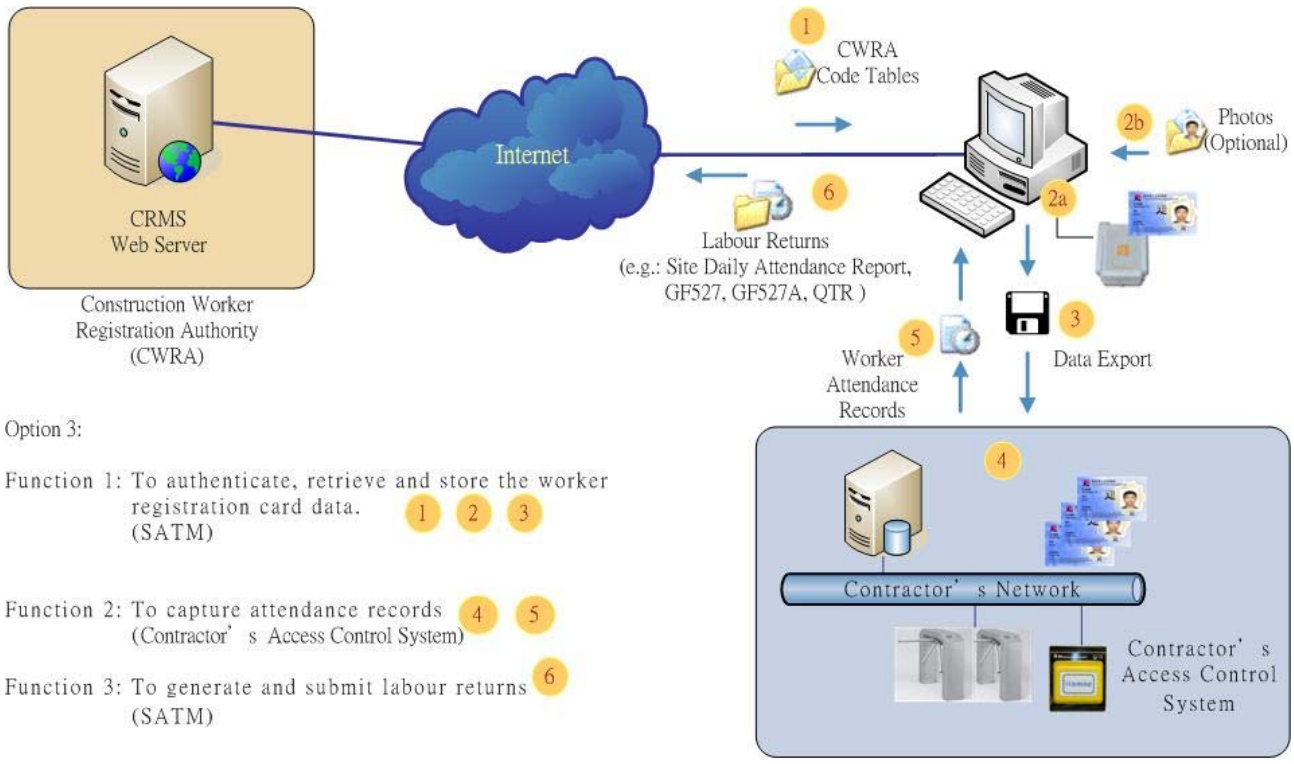


	Total No. of Workers	Skilled Workers		Skilled Workers plus Semi-Skilled Workers	
Specified Trade (Skilled worker code/ Semi-skilled worker code)	Engaged on Site (imported labour excluded)	Minimum No. Required	Actual No. Employed	Minimum No. Required	Actual No. Employed
Bricklayer (C305/C405)	1	0	1	0	1
Electrician/Electrical Fitter (E305)	0	0	0	0	0
Electrician/Electrical Fitter (E305/E305a,b/E405a,b)	1	0	1	0	1
Refrigeration/AC/Ventilation Mechanic (E314/E314a-e/E414a-e)	0	0	0	0	0

- Choose the desired Year, Month and Contract. Click Retrieve button to retrieve the summary record.
- User may adjust the numeric values in the grid. The amended values will be displayed in red.
- Click Save button to saved the changes.
- To submit the form (QTR Submission Summary & Details) to CWRA, simply click the Submit to CWRA button. Provided that internet connection is available, the system will prompt the CWRA portal login form for user to enter the login credential before uploading QTR files.
- The Export button allows the user to export the content of the forms to Excel files for submission to CWRA portal through other internet accessible machines. The exported file's name & path will be according to the convention as defined in Appendix G.
- The Cancel button will reset the program.
- The Exit button will exit the program.

4 Option 3 - Use of Partial SATM Functions (Worker Registration & Labour Return Generation)

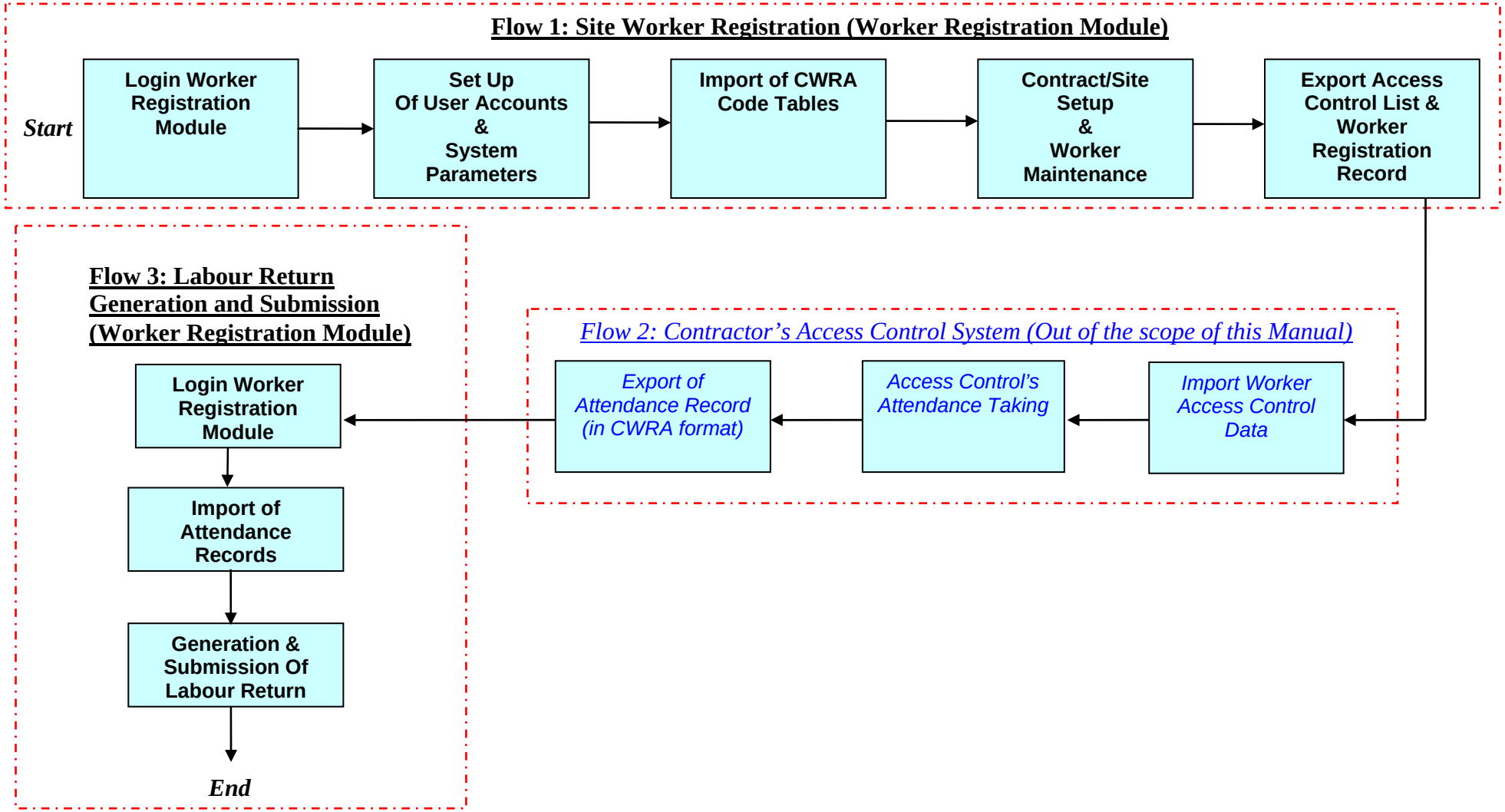
This option uses the full version of the SATM program but only utilises part of the available functions (i.e. Worker Registration, and Labour Return generation functions). This option is suitable for Construction Company that only has a basic access control system that can log down the attendance records of the workers. The interfaces between the SATM program and the Construction Company's access control system are through the pre-defined text files as defined in "Appendix F – SATM Interface File Definition". Below is a summary diagram of the propose option's setup:



Option 3

The following sub-sections illustrate the operation of utilising partial functions of SATM.

4.1 SATM Process Flow



4.2 SATM Functions - Flow 1: Site Worker Registration

Please refer to section 3.2 for the processes of the flow.

4.3 SATM Functions - Flow 2: Contractor's Access Control System (Out of the scope of this Manual)

The implementation of the Contractor's Access Control System is out of the scope of this manual. However, the interfaces between the SATM and contractor's system must adhere to the interface file definition as defined in "Appendix F – SATM Interface File Definition". Also, the worker information between the SATM and contractor's access control system must be in synchronization.

4.4 SATM Functions - Flow 3: Labour Return Generation and Submission (Worker Registration Module)

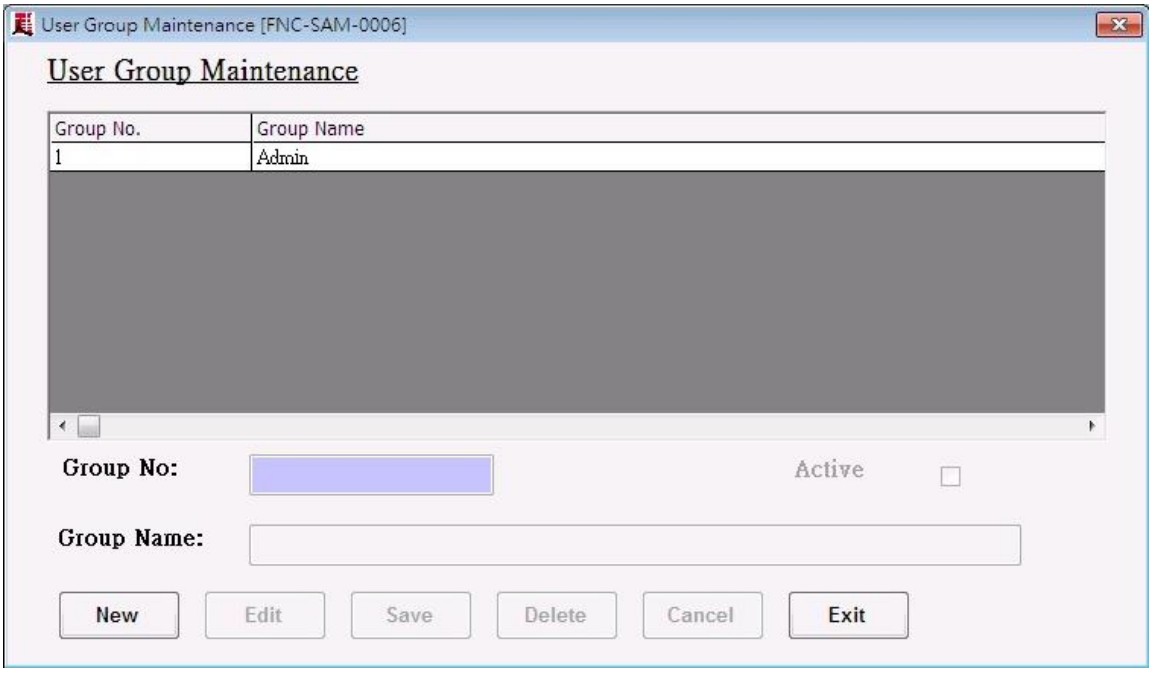
Please refer to section 3.4 for the processes of the flow.

5 Appendix A – Other SATM-Lite Function

5.1.1 System Functions

5.1.1.1 User Group Maintenance

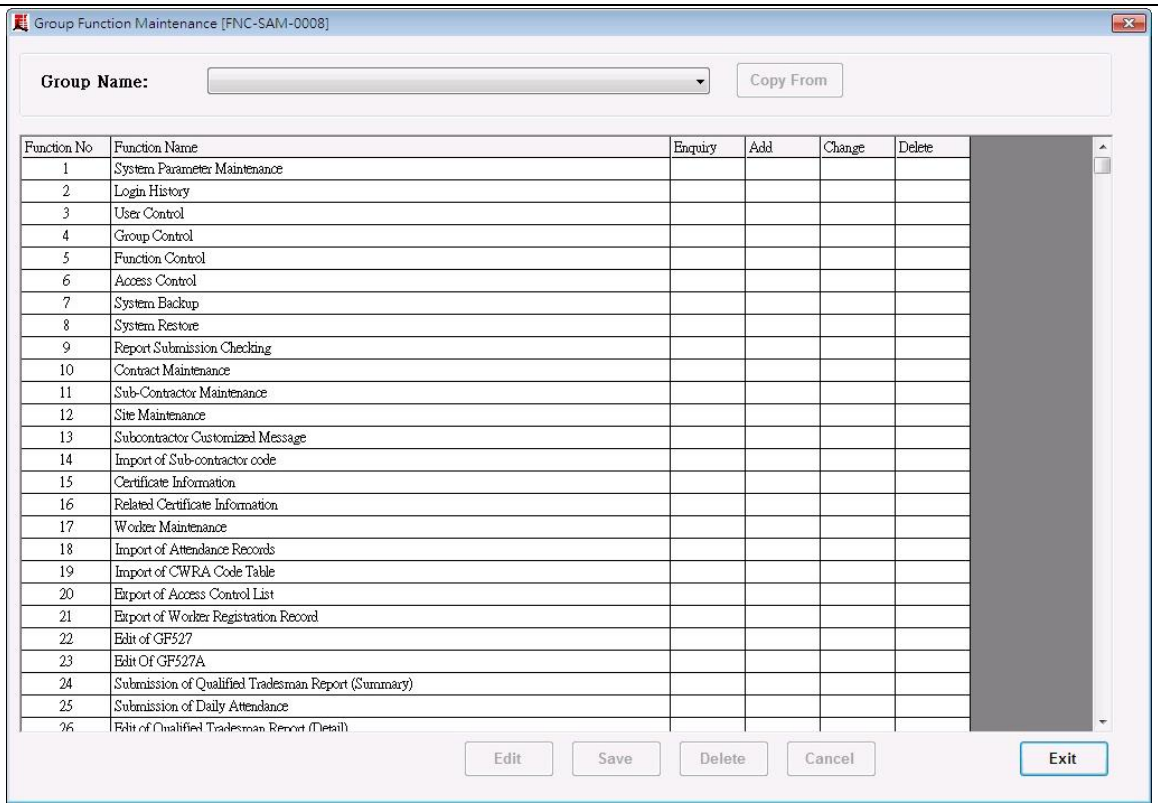
- Click the menu items: ***System → User Group Maintenance***



- A default user group (Admin) has been already created in the sysetem.. User may create, edit , delete any user account using this program using the button New, Edit, Delete respectively.
- The Save button saves any changes. The Cancel button clear the form. The Exit button exit the program withour saving.

5.1.1.2 Group Function Maintenance

- Click the menu items: ***System → Group Function Maintenance***

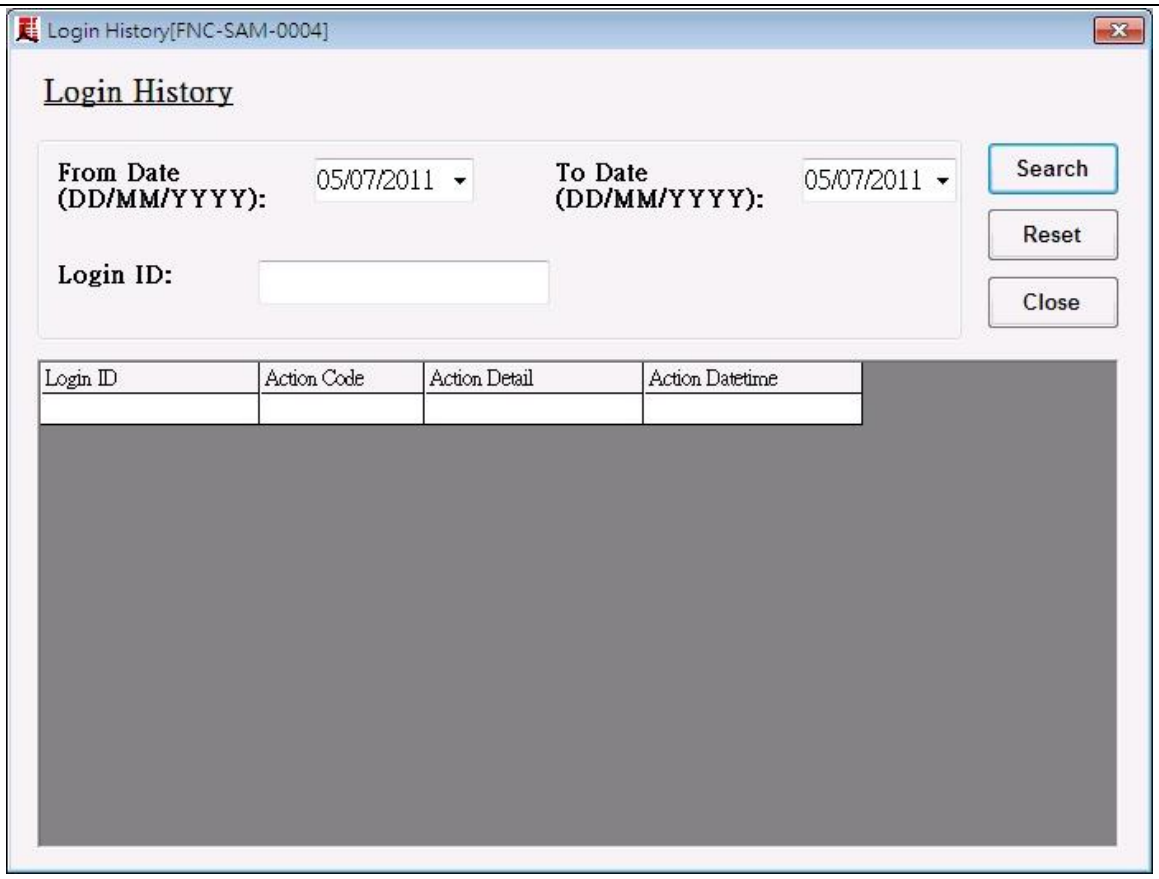


Function No	Function Name	Enquiry	Add	Change	Delete
1	System Parameter Maintenance				
2	Login History				
3	User Control				
4	Group Control				
5	Function Control				
6	Access Control				
7	System Backup				
8	System Restore				
9	Report Submission Checking				
10	Contract Maintenance				
11	Sub-Contractor Maintenance				
12	Site Maintenance				
13	Subcontractor Customized Message				
14	Import of Sub-contractor code				
15	Certificate Information				
16	Related Certificate Information				
17	Worker Maintenance				
18	Import of Attendance Records				
19	Import of CWRA Code Table				
20	Export of Access Control List				
21	Export of Worker Registration Record				
22	Edit of GF527				
23	Edit Of GF527A				
24	Submission of Qualified Tradesman Report (Summary)				
25	Submission of Daily Attendance				
26	Edit of Qualified Tradesman Report (Detail)				

- For the retrieved records, user may click the Edit button and then double click on the relevant boxes for Enquiry, Add, Change or Delete for the relevant function for the retreived group so that access control can be set for the group's user memembers.
- The Copy From button allows the user to copy the access right settings to another user group.
- Click Save button to save any changes.
- Click Delete button to clear all access access rights for the retrieved group.
- Click Cancel to undo your changes and revert back to the previous state.
- Click Exit button to exit the program.

5.1.1.3 Login History

- Click the menu items: ***System → Login History***



- This function shows the login history of the system.
- Choose the searching criteria From Date, To Date, Login ID. Click Search to search the relevant login attempts.
- Click Reset button to reset the seaching criterias.
- Click Close to exit the program.

5.1.1.4 System Backup

- Click the menu items: ***System → System Backup***

- This functions allows the backup of the system's database.
- The default file is displayed and user may edit it to desired filename. User may also use Browse button to point to another destination.
- Click Backup button to backup the system's database.
- Click Close button to exit the program.

5.1.1.5 System Restore

- Click the menu items: ***System → System Restore***

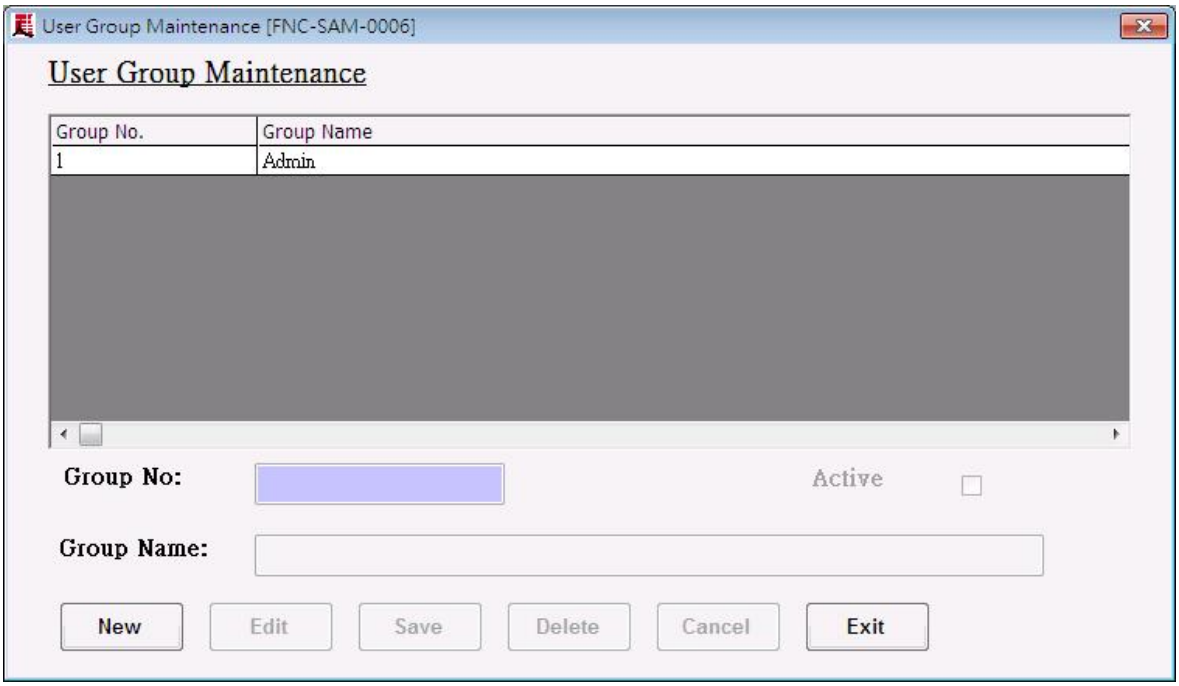
- This functions allows the restoration of a previous backup of the system's database.
- The default file is displayed and user may edit it to desired filename. User may also use Browse button to point to another backup file.
- Click Restore button to restore the data from the backup file.
- Click Close button to exit the program.

6 Appendix B – Other SATM Function

6.1.1 System Functions

6.1.1.1 User Group Maintenance

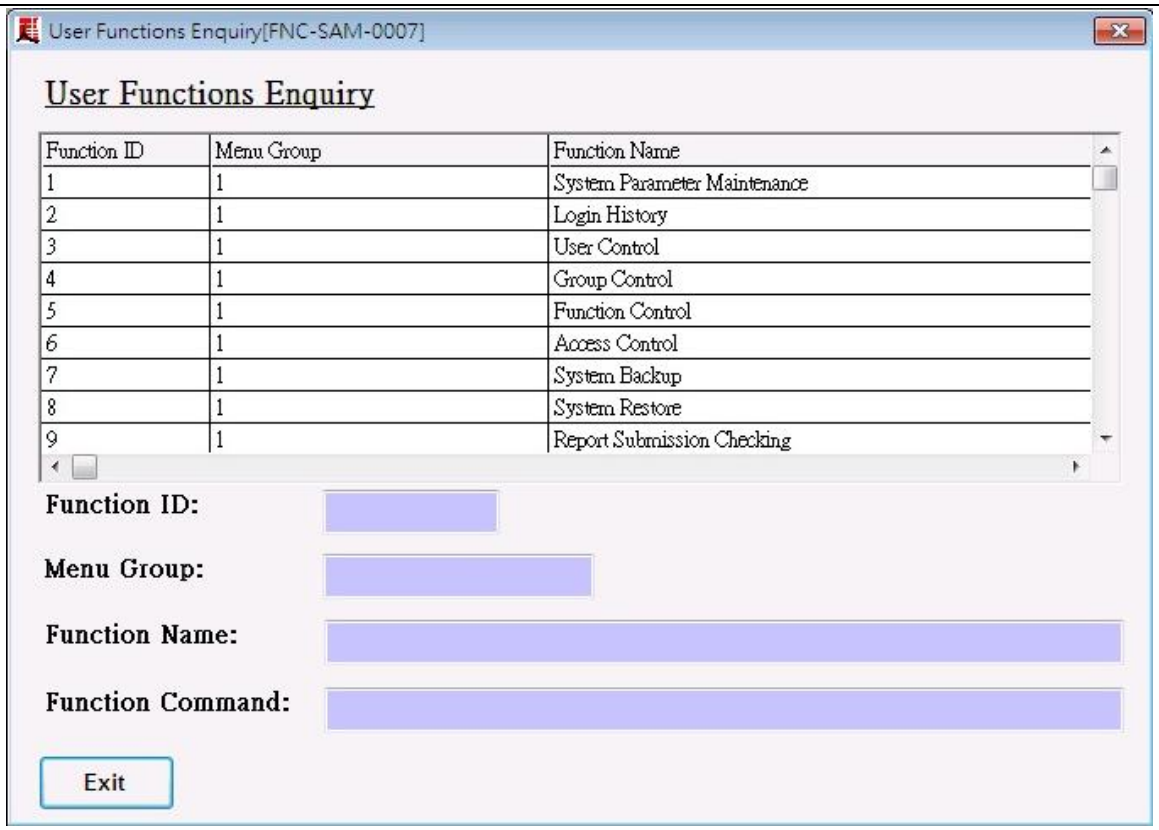
- Click the menu items: ***System → User Group Maintenance***



- A default user group (Admin) has been already created in the sysetem.. User may create, edit , delete any user account using this program using the button New, Edit, Delete respectively.
- The Save button saves any changes. The Cancel button clear the form. The Exit button exit the program without saving.

6.1.1.2 User Functions Enquiry

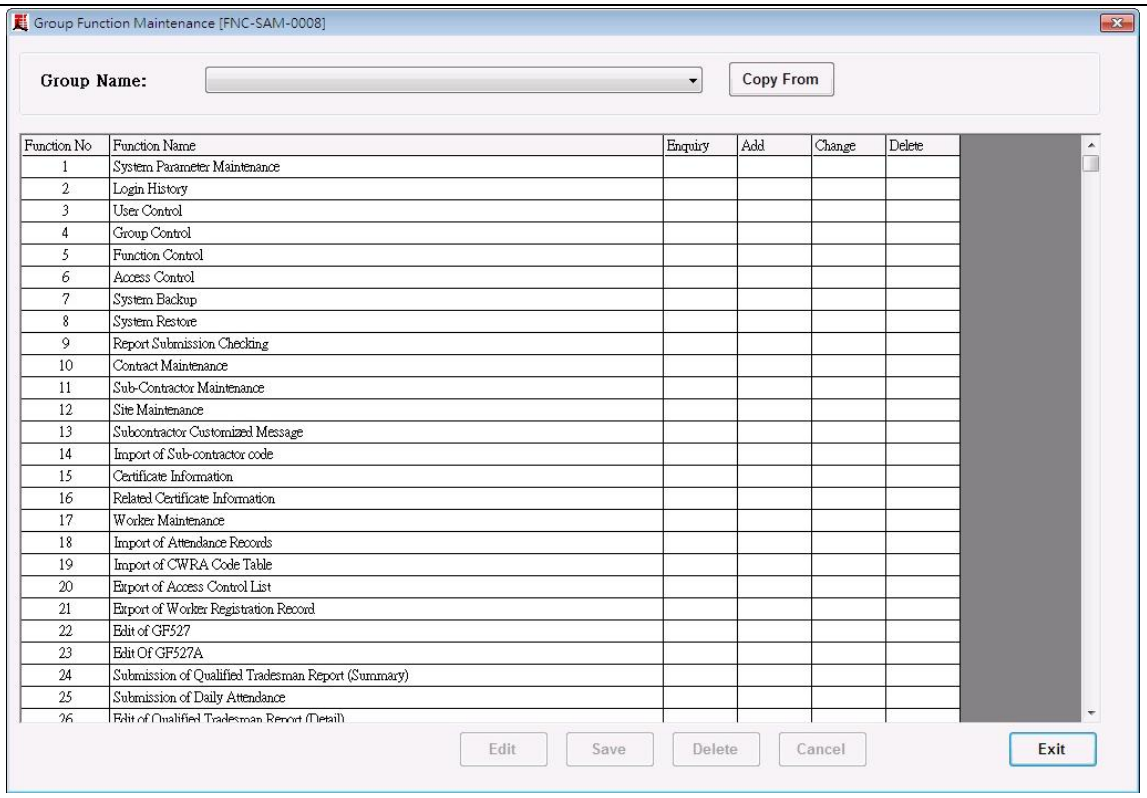
- Click the menu items: ***System → User Functions Enquiry***



- The grid lists out all the functions available for the user.
- The Exit button close the program.

6.1.1.3 Group Function Maintenance

- Click the menu items: ***System → Group Function Maintenance***

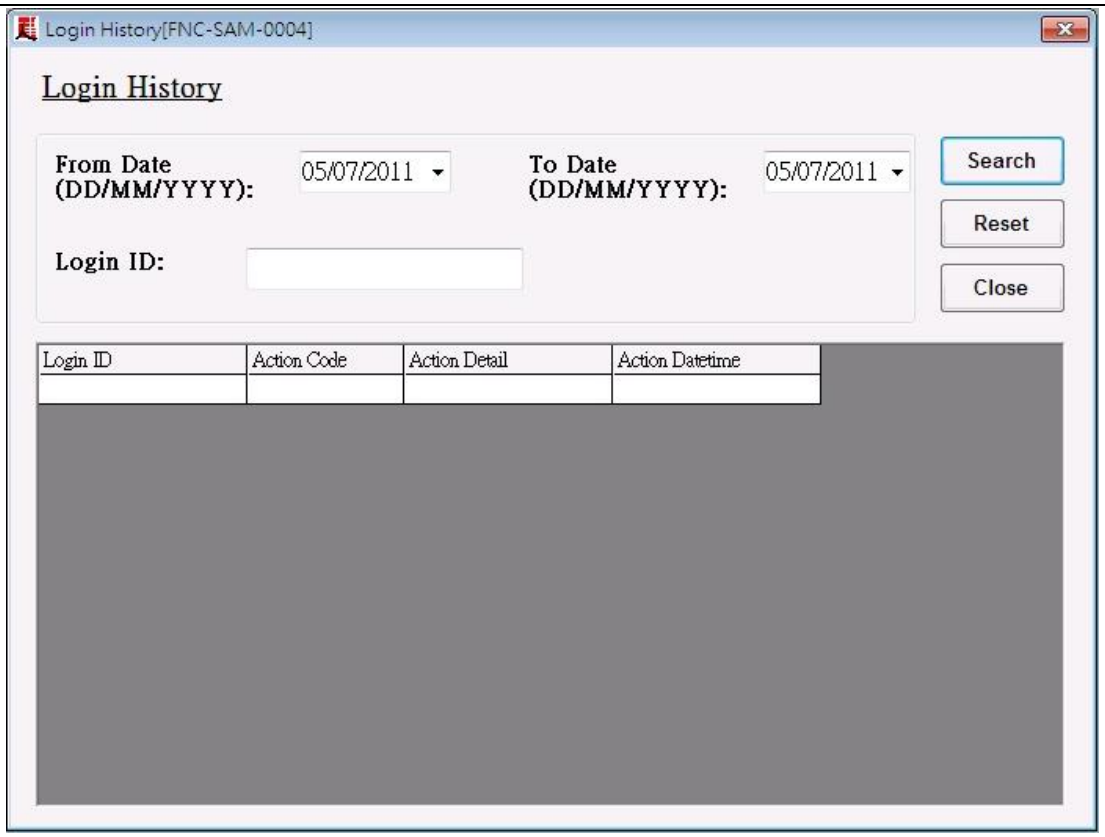


Function No	Function Name	Enquiry	Add	Change	Delete
1	System Parameter Maintenance				
2	Login History				
3	User Control				
4	Group Control				
5	Function Control				
6	Access Control				
7	System Backup				
8	System Restore				
9	Report Submission Checking				
10	Contract Maintenance				
11	Sub-Contractor Maintenance				
12	Site Maintenance				
13	Subcontractor Customized Message				
14	Import of Sub-contractor code				
15	Certificate Information				
16	Related Certificate Information				
17	Worker Maintenance				
18	Import of Attendance Records				
19	Import of CWRA Code Table				
20	Export of Access Control List				
21	Export of Worker Registration Record				
22	Edit of GF527				
23	Edit Of GF527A				
24	Submission of Qualified Tradesman Report (Summary)				
25	Submission of Daily Attendance				
26	Edit of Qualified Tradesman Report (Detail)				

- For the retrieved records, user may click the Edit button and then double click on the relevant boxes for Enquiry, Add, Change or Delete for the relevant function for the retreived group so that access control can be set for the group's user memembers.
- The Copy From button allows the user to copy the access right settings to another user group.
- Click Save button to save any changes.
- Click Delete button to clear all access rights for the retrieved group.
- Click Cancel to undo your changes and revert back to the previous state.
- Click Exit button to exit the program.

6.1.1.4 Login History

- Click the menu items: ***System → Login History***



- This function shows the login history of the system.
- Choose the searching criteria From Date, To Date, Login ID. Click Search to search the relevant login attempts.
- Click Reset button to reset the seaching criterias.
- Click Close to exit the program.

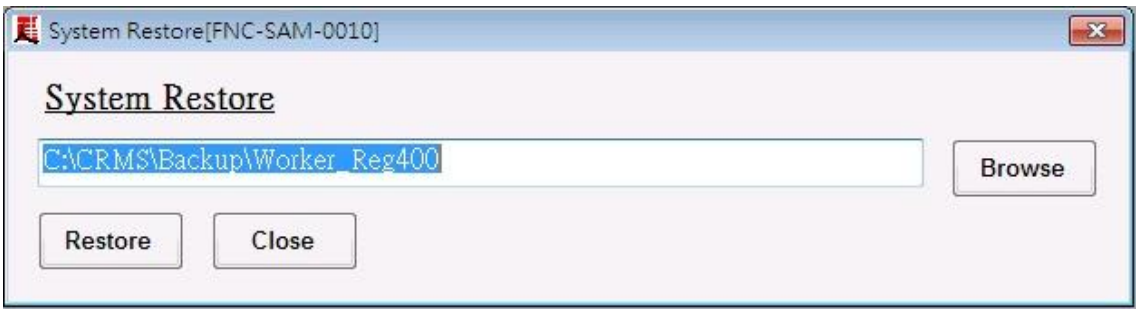
6.1.1.5 System Backup

- Click the menu items: ***System → System Backup***

- This functions allows the backup of the system's database.
- The default file is displayed and user may edit it to desired filename. User may also use Browse button to point to another destination.
- Click Backup button to backup the system's database.
- Click Close button to exit the program.

6.1.1.6 System Restore

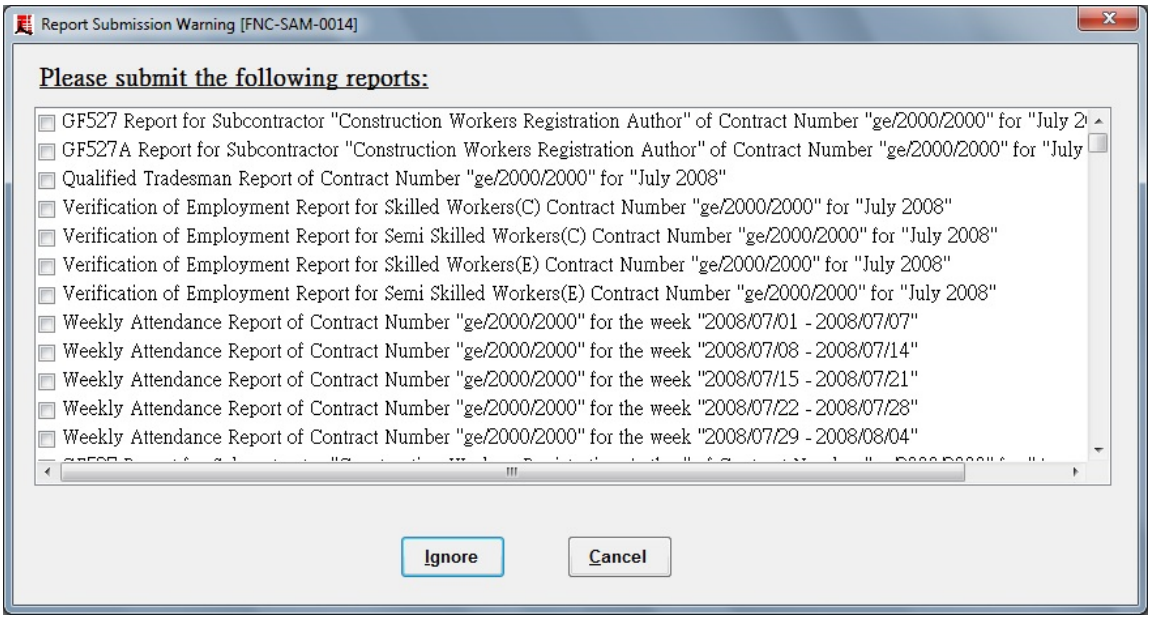
- Click the menu items: ***System → System Restore***



- This functions allows the restoration of a previous backup of the system's database.
- The default file is displayed and user may edit it to desired filename. User may also use Browse button to point to another backup file.
- Click Restore button to restore the data from the backup file.
- Click Close button to exit the program.

6.1.1.7 Report Submission Warning

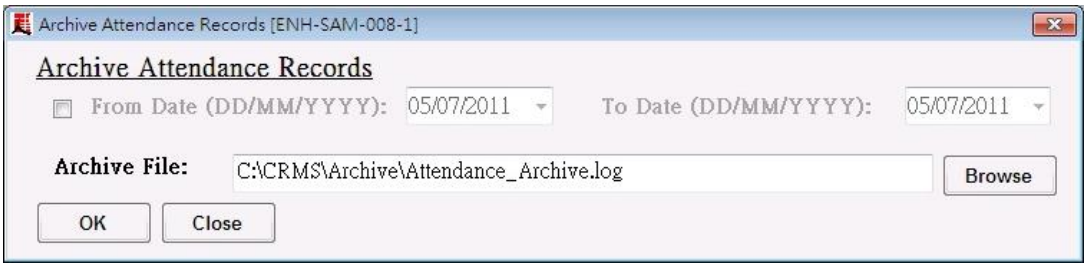
- Click the menu items: ***System → Report Submission Warning***



- The system has an auto-reminder function to remind user to submit the Labour Returns.
- The system paramter "Report Submission Warning" is to turn on/off the Labour Return reminders (see section 3.2.2.2). If it is turned on, the user will get the reminder on the Labour Return submissions.
- To ensure than the reminder message will not alert when user login next time, user need to check the relevant reminders' checkbox as shown above. Then, click the Ignore button to ignore the messages and exit the function.
- Click Cancel to exit the program.

6.1.1.8 Archive Attendance Records

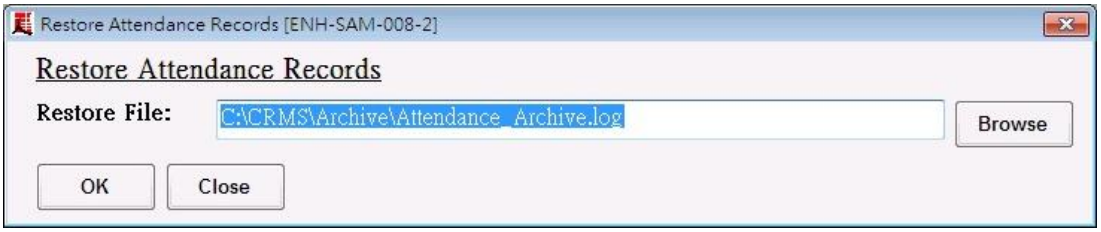
- Click the menu items: ***System → HouseKeeping → Archive Attendance Records***



- Check the checkbox and select the date range for which the corresponding attendance records should be archived to the filed as shown in the Archive File field.
- The Archive File field may be edited to the desired name or user the Browse button to point to a file.
- Click OK to archive the records. Note that the archived attendance records will be deleted in the system.
- Click Close button to exit the program.

6.1.1.9 Restore Attendance Records

- Click the menu items: ***System → HouseKeeping → Restore Attendance Records***

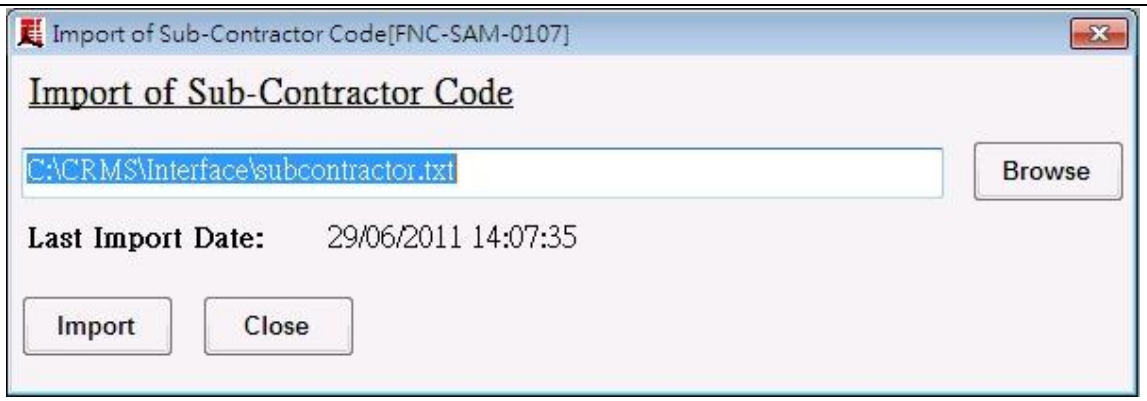


- User may edit the Restore File field to point to the desired atttendance records archive log file for the restoration of the records to the system. User may also use the Browse button for this purpose.
- Click OK button to restore the records of the archive file.
- Click Close button to exit the function.

6.1.2 Interface

6.1.2.1 Import of Sub-Contractor

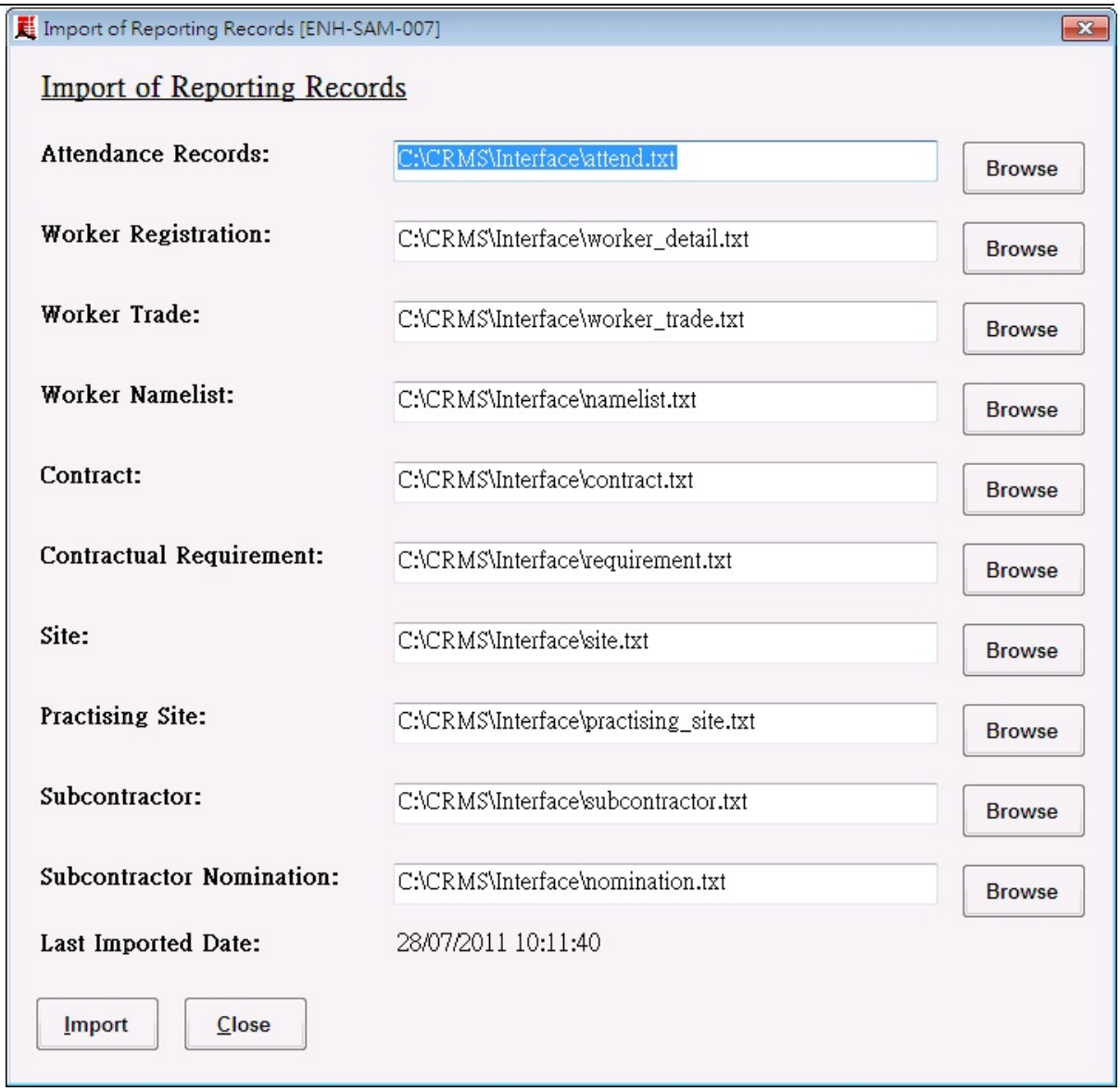
- Click the menu items: ***Interface → Import → General → Import of Sub-Contractor***



- This function allows user to import a list of sub-contractor to the system to save time to input them manually. The list must be conformed to the interface file definition "Appendix F – SATM Interface File Definition".
- User may edit the target file field to the desire file or click Browse button to point to the file.
- Click Import button to import the sub-contractor details into the system.
- Click Close button to exit the program.

6.1.2.2 Import of Reporting Records

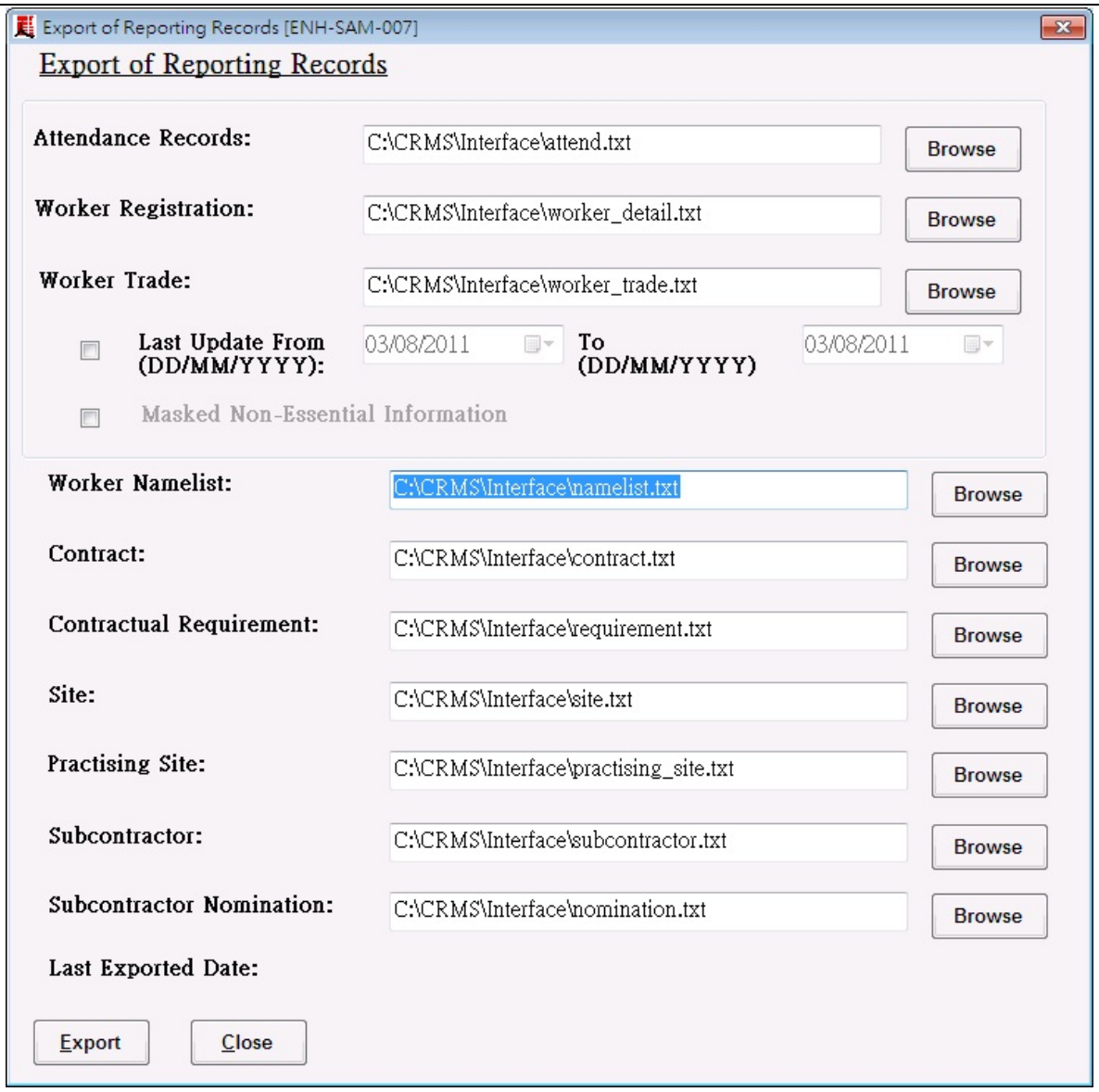
- Click the menu items: ***Interface → Import → Reporting → Import of Reporting Records***



- This function is enabled for use when the SATM system is configured in a Reporting Mode (i.e. system is configured in the scenario where a central reporting machine for Labour Return generation and distributed worker registration/attendance capture sites). See "Appendix C – SATM Operation Mode" for further information. It allows user to import the worker registration and attendace records from distributed sites to a centrally set up reporting station for the generation of Labour Return.
- Ensure that the corresponding interface files are located in the specified path. The Browse buttons allow user to point to the desired file.
- Click Import button to import the files.
- Click Close button to exit the program.

6.1.2.3 Export of Reporting Records

- Click the menu items: ***Interface → Export → Reporting → Export of Reporting Records***



- This function is enabled for use when the SATM system is configured in a Registration Mode (i.e. system is configured in the scenario where a central reporting machine for Labour Return generation and distributed worker registration/attendance capture sites). See “Appendix C – SATM Operation Mode” for further information. It allows user to export the worker registration and attendace records from distributed sites for import by the central reporting machine.
- User may edit the target file or use the Browse buttons to point to the desired file.
- For Worker Registration and attendance records, user may check the Last Update From/To checkbox to filter the exported records based on the selected dates. Default the checkbox is unchecked which means that all records will be exported.
- Click Export button to export the records to the specified files.
- Click Close button to exit the program.

6.1.3 Master Maintenance

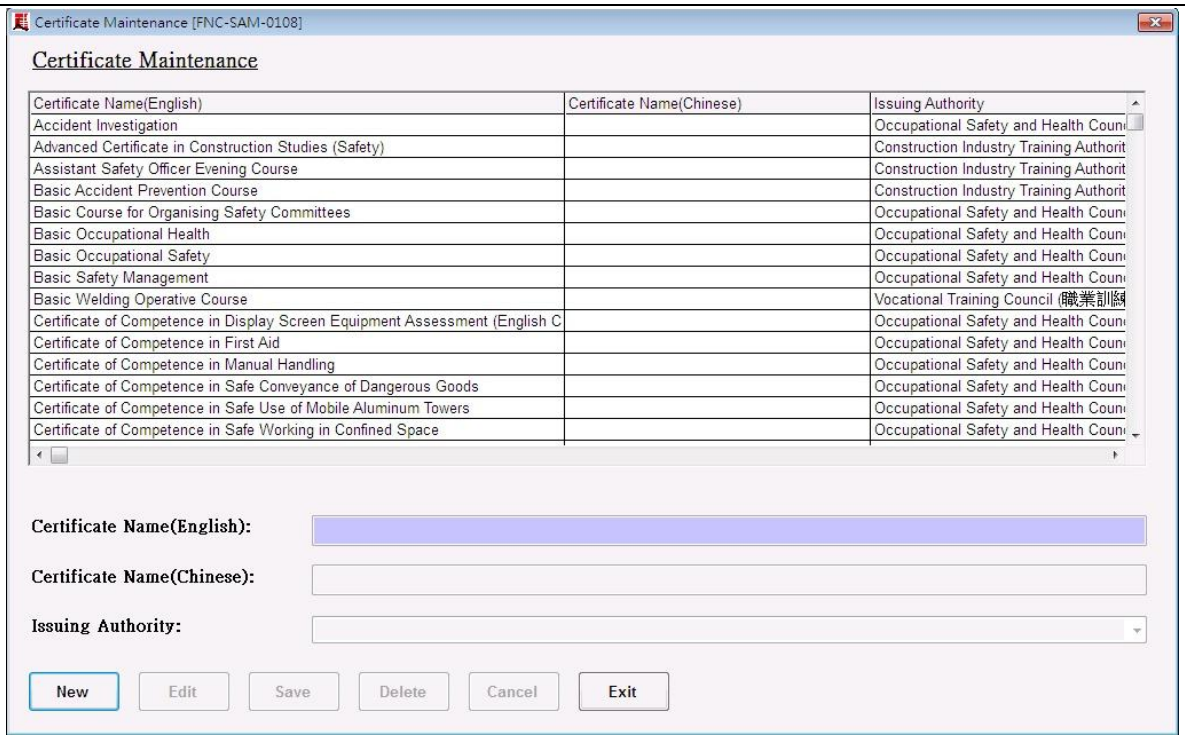
6.1.3.1 Contractor Customized Option

- Click the menu items: ***Master Maintenance → Contractor Customized Option***

- This function allows user to enter up to 6 pre-defined message that can be attached to a particular worker. When using the SATM – Attendance Capture Module, the messages that had been attached to a particular worker will be displayed on the PC's screen when he/she checks in or out.
- Click the Edit button to add the messages.
- Click Save button to save the changes.
- Click Exit button the exit the program.

6.1.3.2 Certificate Information

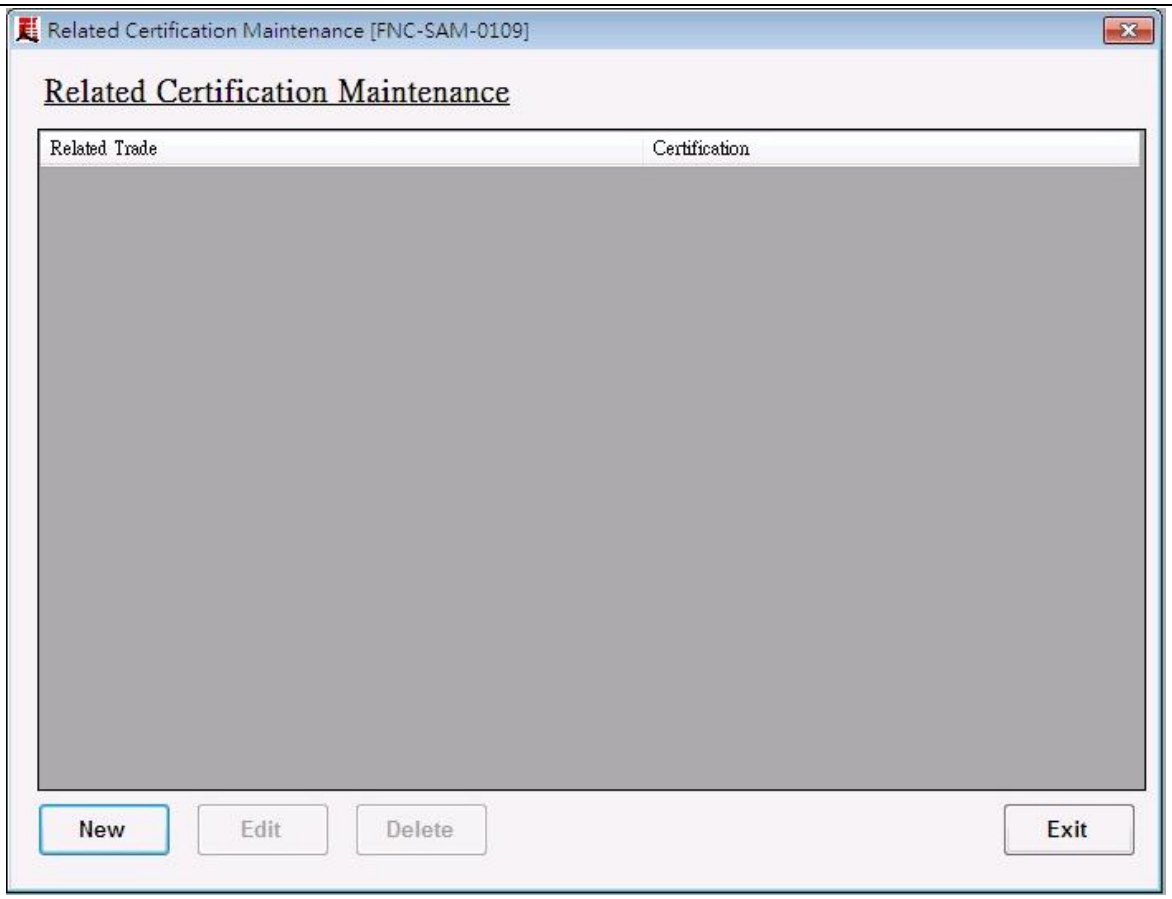
- Click the menu items: ***Master Maintenance → Certificate Information***



- This function allows user to maintain commonly industry's commonly used certificate so that it can be attached to a particular worker for reference. A list of commonly used certificate had already been included. However, user may amend or add their desired certification.
- Click New button to add a record.
- From the grid, double-click a record and click Edit button to amend the record.
- Click Save button to save the changes.
- Click Delete button to delete the current record.
- Click Cancel button to cancel the changes.
- Click Exit button to exit the program.

6.1.3.3 Related Certificate Maintenance

- Click the menu items: ***Master Maintenance → Related Certificate Maintenance***

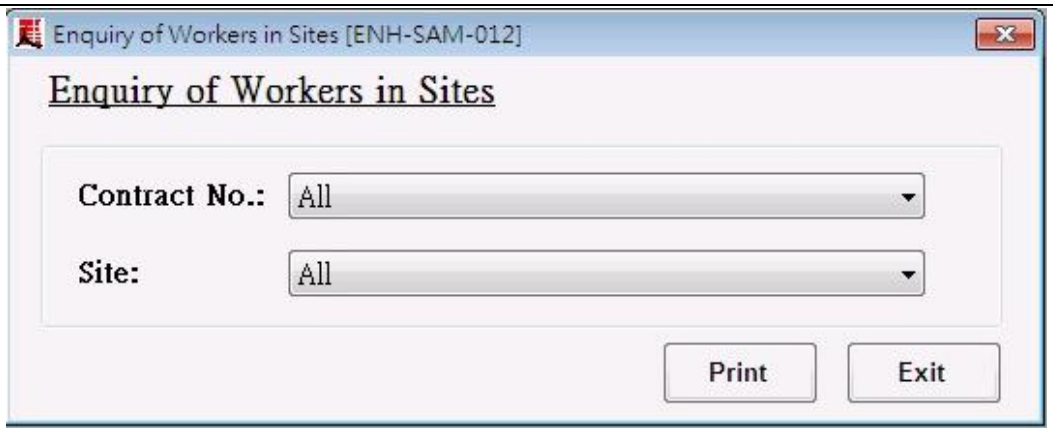


- This function allows user to associate a particular certificate defined in the system to a particular trade. When this association is established, the system will alert user to check for the relevant certificate when a worker is marking the trade as his practising trade in the program Worker Maintenance (see section 3.2.4.4).
- Click New button to setup a new relationship between a trade and a certificate.
- Use the list boxes to select the trade and certificate.
- Click Confirm button to accept the association setup or click Cancel button to cancel.
- When an association is setup, it will be shown on the grid.
- Click Edit button to edit the current record.
- Click Delete button to delete the current record.
- Click Exit button to exit the program.

6.1.4 Worker Management

6.1.4.1 Enquiry of Workers in Sites

- Click the menu items: ***Worker Management → Enquiry of Workers in Sites***

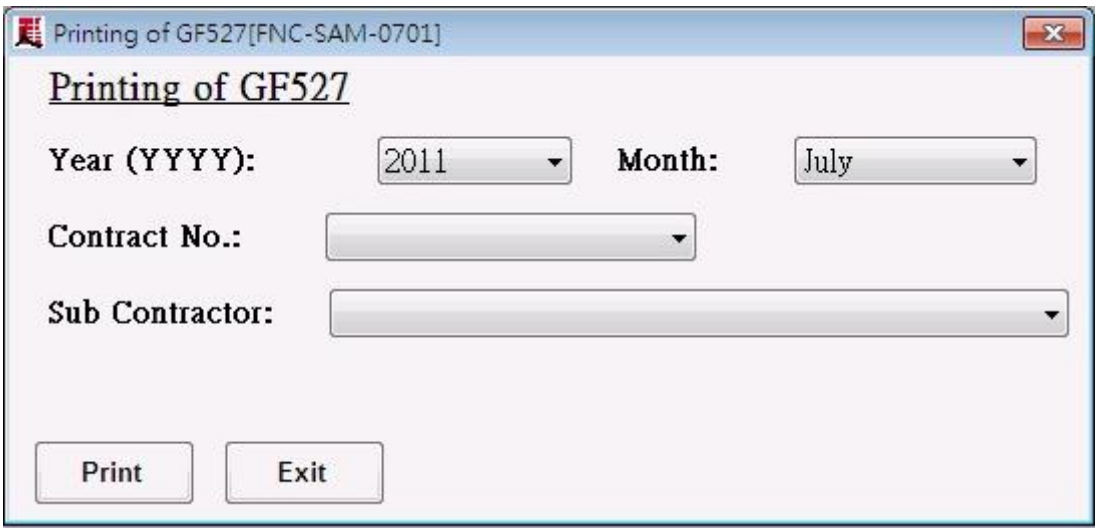


- This function allow users to generate the report to list out the workers registered in the system.
- Choose the desired criteria: Contract No., Site. Note, user may choose the All option to list out all the registered worker of all contracts/sites.
- Click Print button to generate the report for view/printout.
- Click Exit button to exit the program.

6.1.5 Report

6.1.5.1 GF527

- Click the menu items: ***Report → GF527***



- This functions allows the user to generate/print the Labour Return – GF527 for user to keep a hard copy for their reference.
- Choose the desired criteria: Year; Month; Contract No.; Sub Contractor. Note that only records that had been generated and saved to system, using the GF527 function under the Labour Return menu item, can be selected by this function.
- Click Print button to generate the report for view/printout.
- Click Exit button to exit the program.

6.1.5.2 GF527A

- Click the menu items: ***Report → GF527A***

- This functions allows the user to generate/print the Labour Return – GF527A for user to keep a hard copy for their reference.
- Choose the desired criteria: Year; Month; Reference no. in Building Department / Contract No.; Contractor. Note that only records that had been generated and saved to system, using the GF527A function under the Labour Return menu item, can be selected by this function.
- Click Print button to generate the report for view/printout.
- Click Exit button to exit the program.

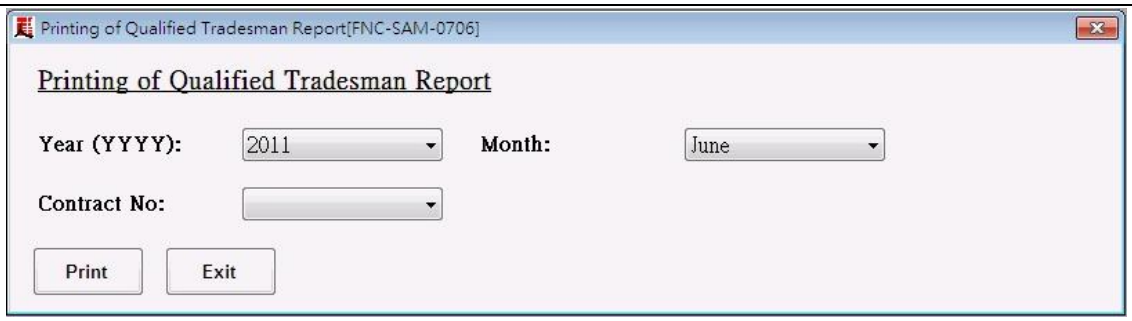
6.1.5.3 Qualified Tradesman Report (Submission Detail)

- Click the menu items: ***Report → Qualified Tradesman Report (Submission Detail)***

- This functions allows the user to generate/print the Labour Return – Qualified Tradesman Report (Submission Detail) for user to keep a hard copy for their reference.
- Choose the desired criteria: Year; Month; Contract No.; Worker Type; Trade Discipline. Note that only records that had been generated and saved to system, using the Qualified Tradesman Report (Submission Detail) function under the Labour Return menu item, can be selected by this function.
- Click Print button to generate the report for view/printout.
- Click Exit button to exit the program.

6.1.5.4 Qualified Tradesman Report (Submission Summary)

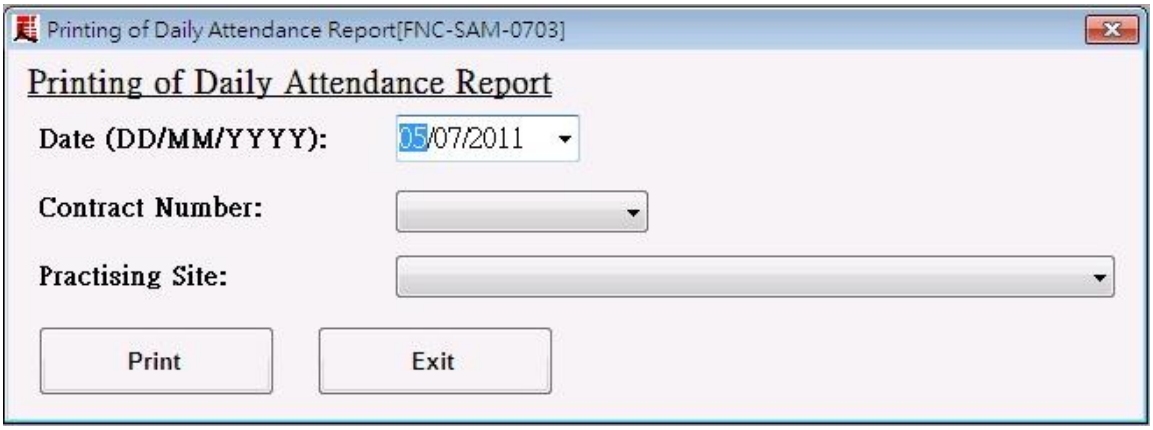
- Click the menu items: ***Report → Qualified Tradesman Report (Submission Summary)***



- This functions allows the user to generate/print the Labour Return – Qualified Tradesman Report (Submission Summary) for user to keep a hard copy for their reference.
- Choose the desired criteria: Year; Month; Contract No.. Note that only records that had been generated and saved to system, using the Qualified Tradesman Report (Submission Summary) function under the Labour Return menu item, can be selected by this function.
- Click Print button to generate the report for view/printout.
- Click Exit button to exit the program.

6.1.5.5 Daily Attendance Report

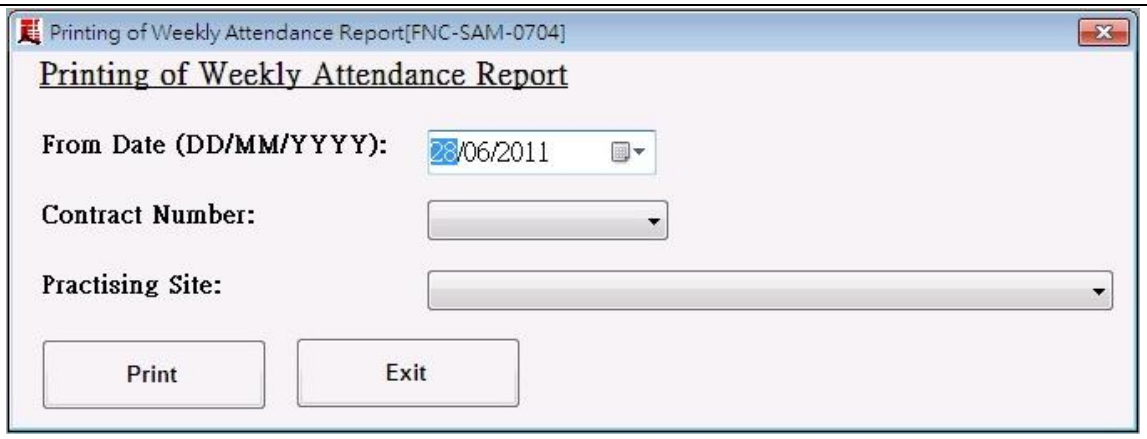
- Click the menu items: ***Report → Daily Attendance Report***



- This functions allows the user to generate/print the Daily Attendance Report. The report list out the attendance records store in the system for the chosen date.
- Choose the desired criteria: Date; Contract Number; Practising Site.
- Click Print button to generate the report for view/printout.
- Click Exit button to exit the program.

6.1.5.6 Weekly Attendance Report

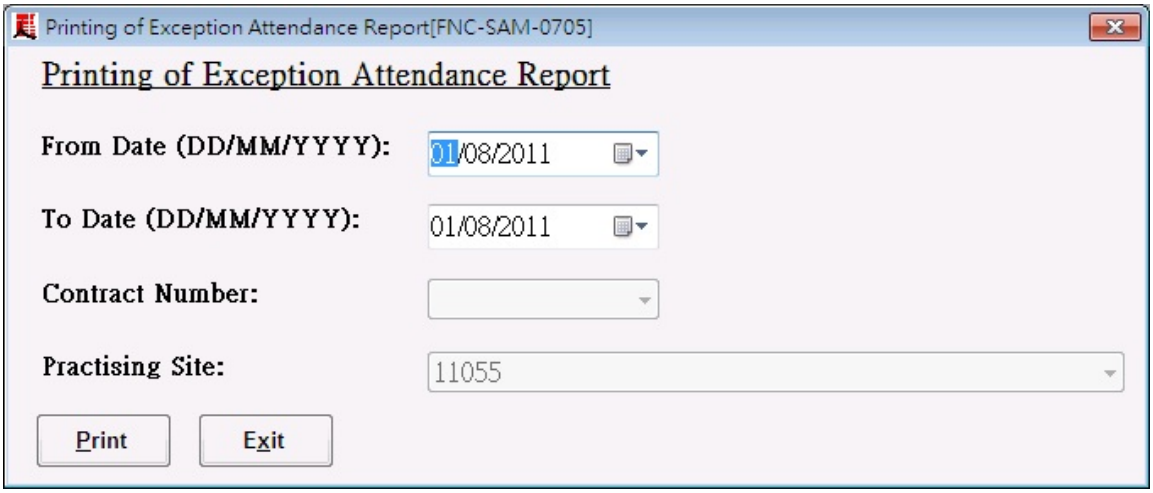
- Click the menu items: ***Report → Weekly Attendance Report***



- This functions allows the user to generate/print the Weekly Attendance Report. The report list out the attendance records store in the system for the week starting from the chosen From Date.
- Choose the desired criteria: From Date; Contract Number; Practising Site.
- Click Print button to generate the report for view/printout.
- Click Exit button to exit the program.

6.1.5.7 Exception Attendance Report

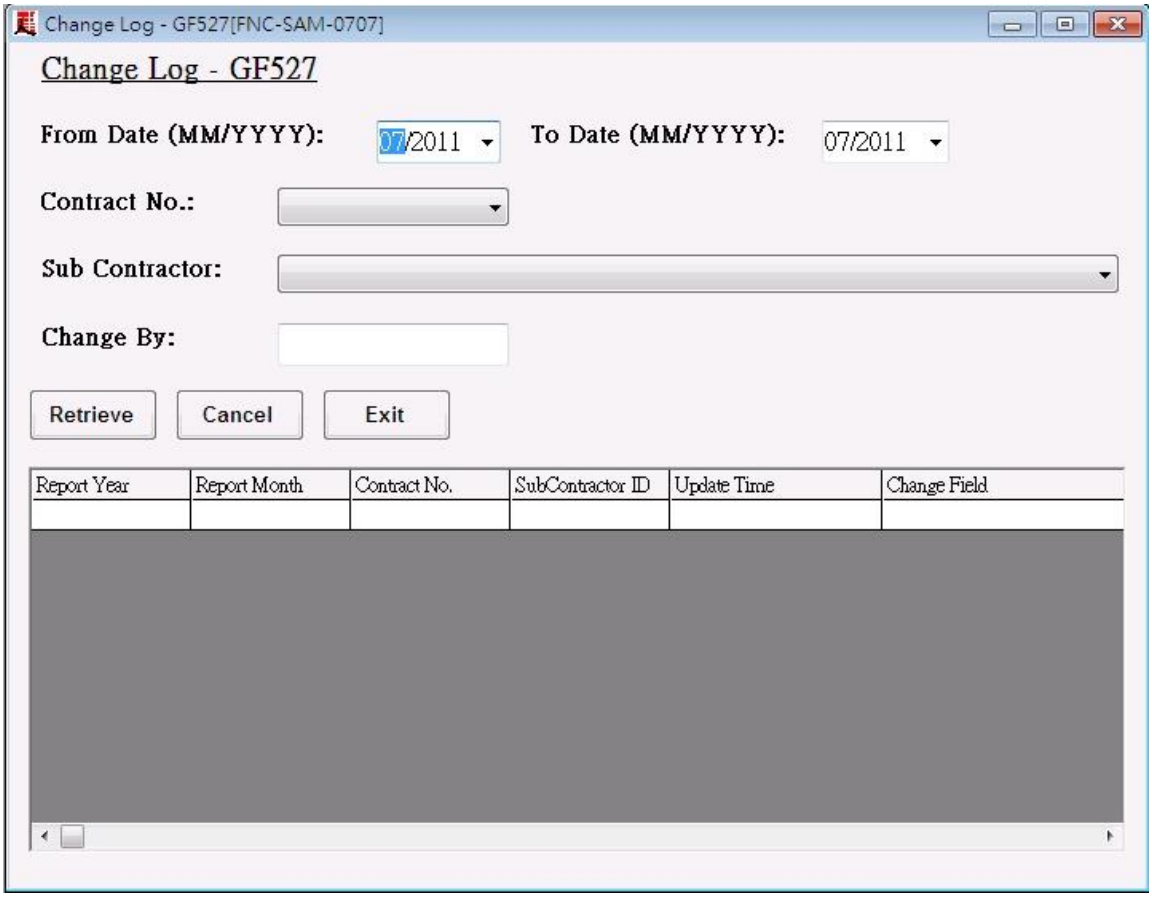
- Click the menu items: ***Report → Exception Attendance Report***



- This functions allows the user to generate/print the Exception Attendance Report. The report list out the exceptional attendance records store in the system for the chosen criteria. Any attendance records that are not in pair (i.e. missing IN or OUT) will be shown in this report.
- Choose the desired criteria: From Date; To Date; Contract Number; Practising Site.
- Click Print button to generate the report for view/printout.
- Click Exit button to exit the program.

6.1.5.8 Change Log – GF527

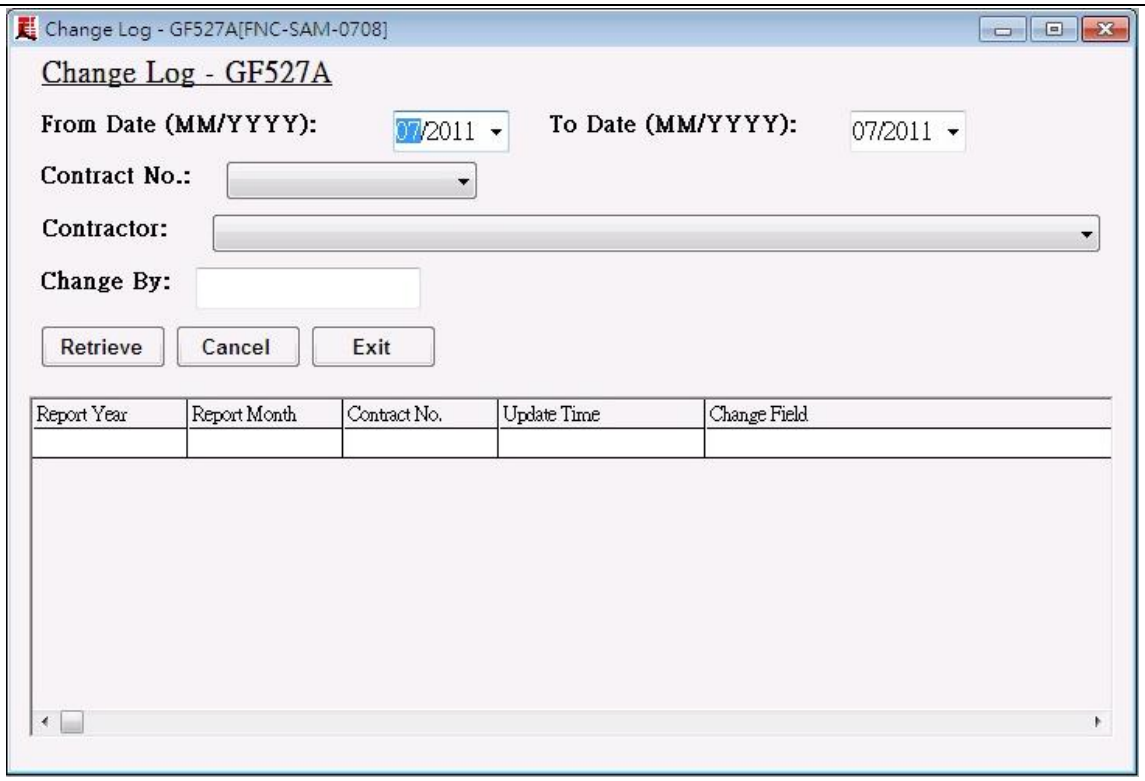
- Click the menu items: ***Report → Change Log – GF527***



- The system has a built-in functions that will log down the changes made to GF527 after its initial image is saved. This function allows the user to displays the changes made to a particular GF527.
- User may choose the criteria: From Date; To Date; Contract No.; Sub Contractor; Change By to search for the relevant changes.
- Click Retrieve button to retrieve the records based on the searching criteria and the record set will be displayed in the below grid.
- Click Cancel button to reset the fields.
- Click Exit button to exit the program.

6.1.5.9 Change Log – GF527A

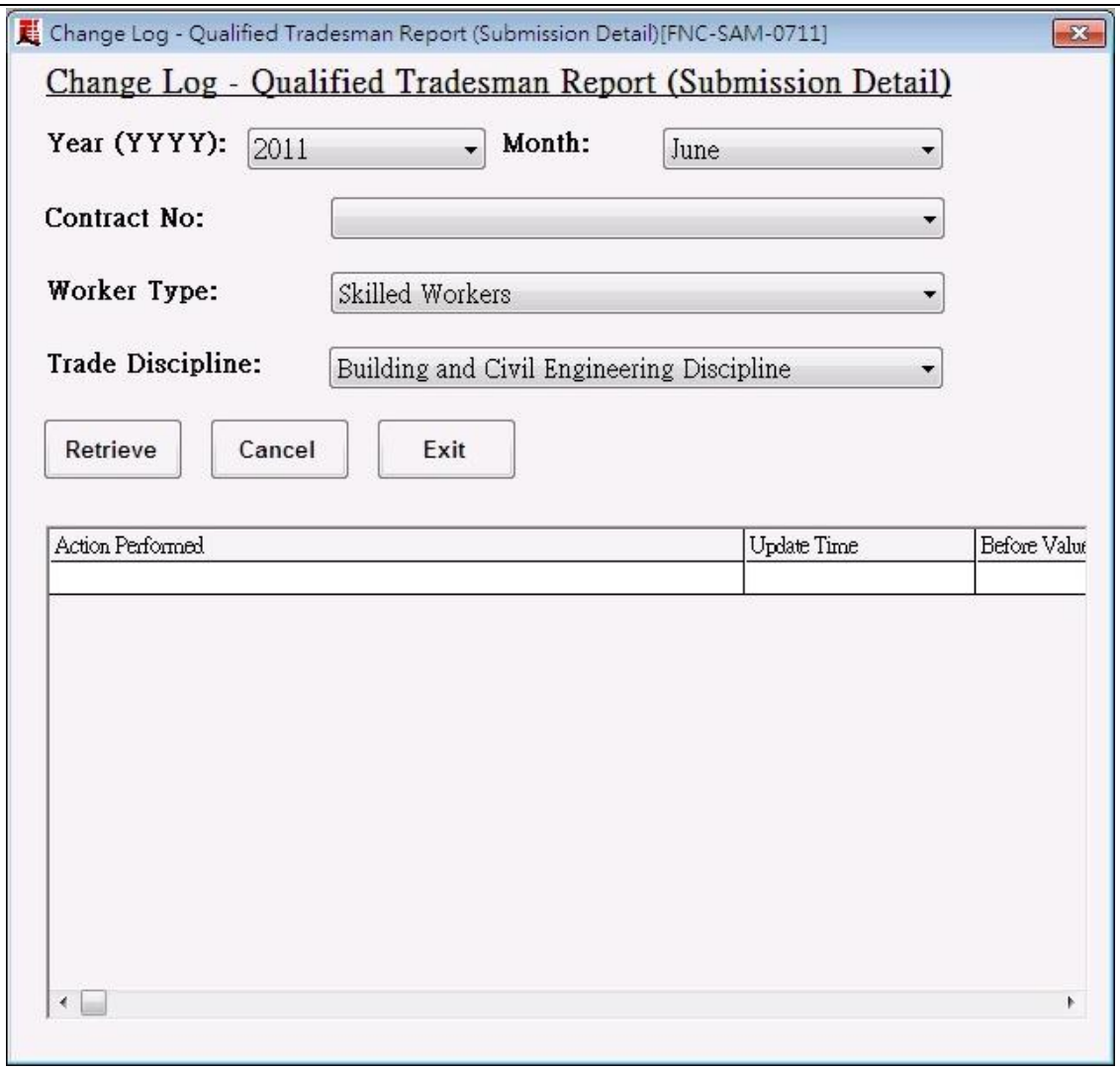
- Click the menu items: ***Report → Change Log – GF527A***



- The system has a built-in functions that will log down the changes made to GF527A after its initial image is saved. This function allows the user to displays the changes made to a particular GF527A.
- User may choose the criteria: From Date; To Date; Contract No.; Sub Contractor; Change By to search for the relevant changes.
- Click Retrieve button to retrieve the records based on the searching criteria and the record set will be displayed in the below grid.
- Click Cancel button to reset the fields.
- Click Exit button to exit the program.

6.1.5.10 Change Log – Qualified Tradesman Report (Submission Detail)

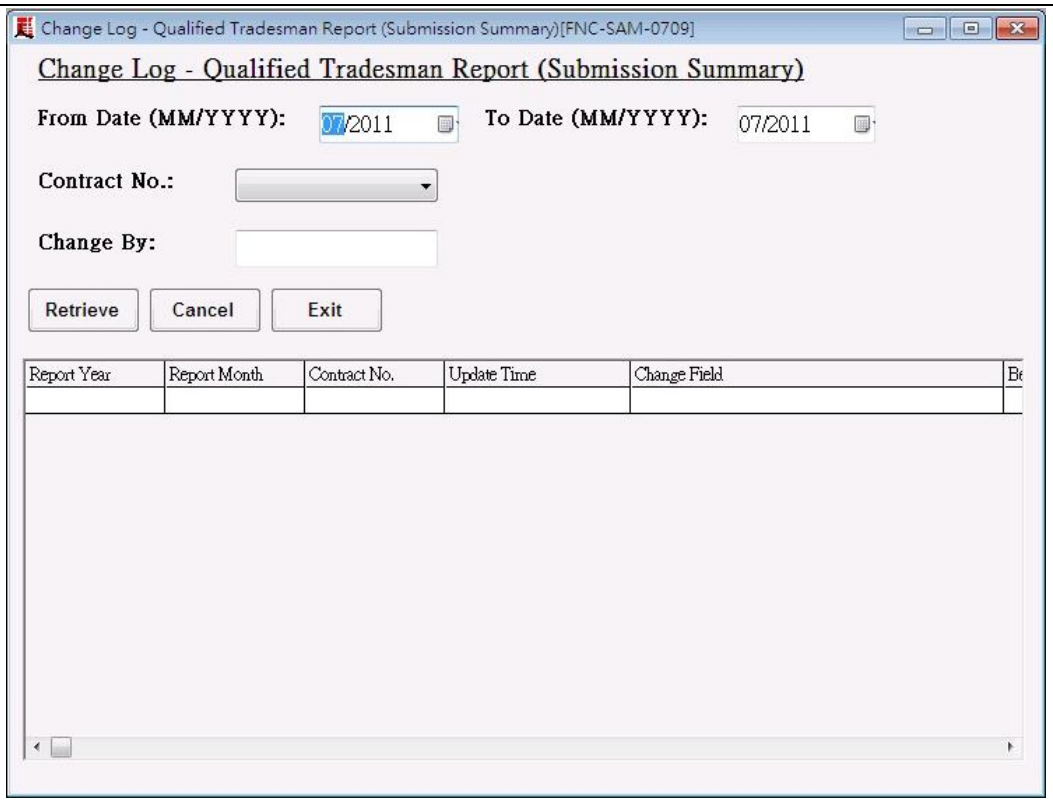
- Click the menu items: ***Report → Change Log - Qualified Tradesman Report → Change Log – Submission Detail***



- The system has a built-in functions that will log down the changes made to Qaulified Tradesman Return (Submission Detail) after its initial image is saved. This function allows the user to displays the changes made to a particular Qaulified Tradesman Return (Submission Detail).
- User may choose the criteria: Year; Month; Contract No.; Worker Type; Trade Discipline to search for the relevant changes.
- Click Retrieve button to retrieve the records based on the searching criteria and the record set will be displayed in the below grid.
- Click Cancel button to reset the fields.
- Click Exit button to exit the program.

6.1.5.11 Change Log – Qualified Tradesman Report (Submission Summary)

- Click the menu items: ***Report → Change Log - Qualified Tradesman Report → Change Log – Submission Summary***



- The system has a built-in functions that will log down the changes made to Qaulified Tradesman Return (Submission Summary) after its initial image is saved. This function allows the user to displays the changes made to a particular Qaulified Tradesman Return (Submission Summary).
- User may choose the criteria: From Date; To Date; Contract No.; Change By to search for the relevant changes.
- Click Retrieve button to retrieve the records based on the searching criteria and the record set will be displayed in the below grid.
- Click Cancel button to reset the fields.
- Click Exit button to exit the program.

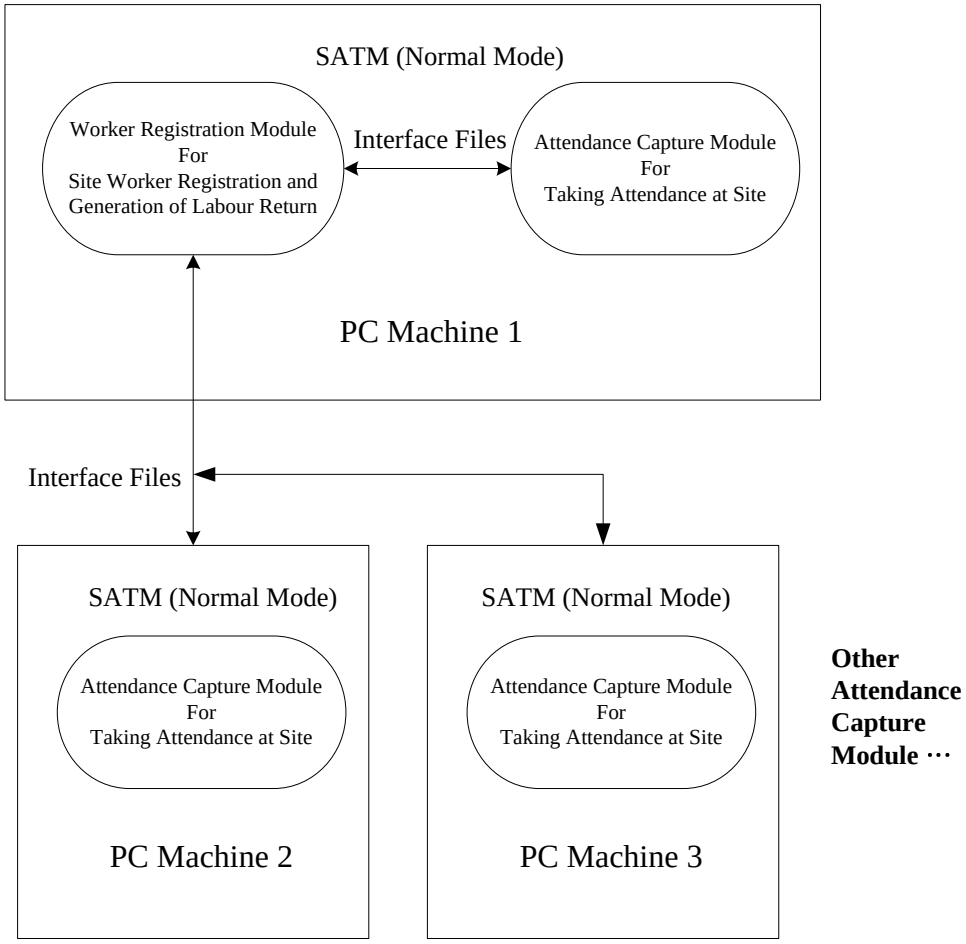
7 Appendix C – SATM Operation Mode

7.1.1 Description

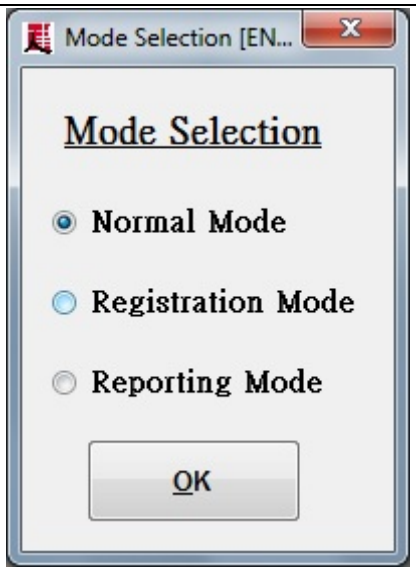
Before using the SATM (full version) program, user is required to setup the operation mode of the SATM during the first logon attempt. Basically, there are 2 types of setup which user needs to decide when setting up the system. These are the normal setup and the distributed setup. Below sections describe the 2 setup type scenarios.

7.1.2 Normal Setup

This SATM normal setup type is such that worker registration and generation of Labour Returns are carried out in the Worker Registration Module setup on a single machine. The Attendance Capture Module can be setup on the same machine as the Worker Registration Module or on other machines to perform attendance taking. Below is a summary diagram of the setup:

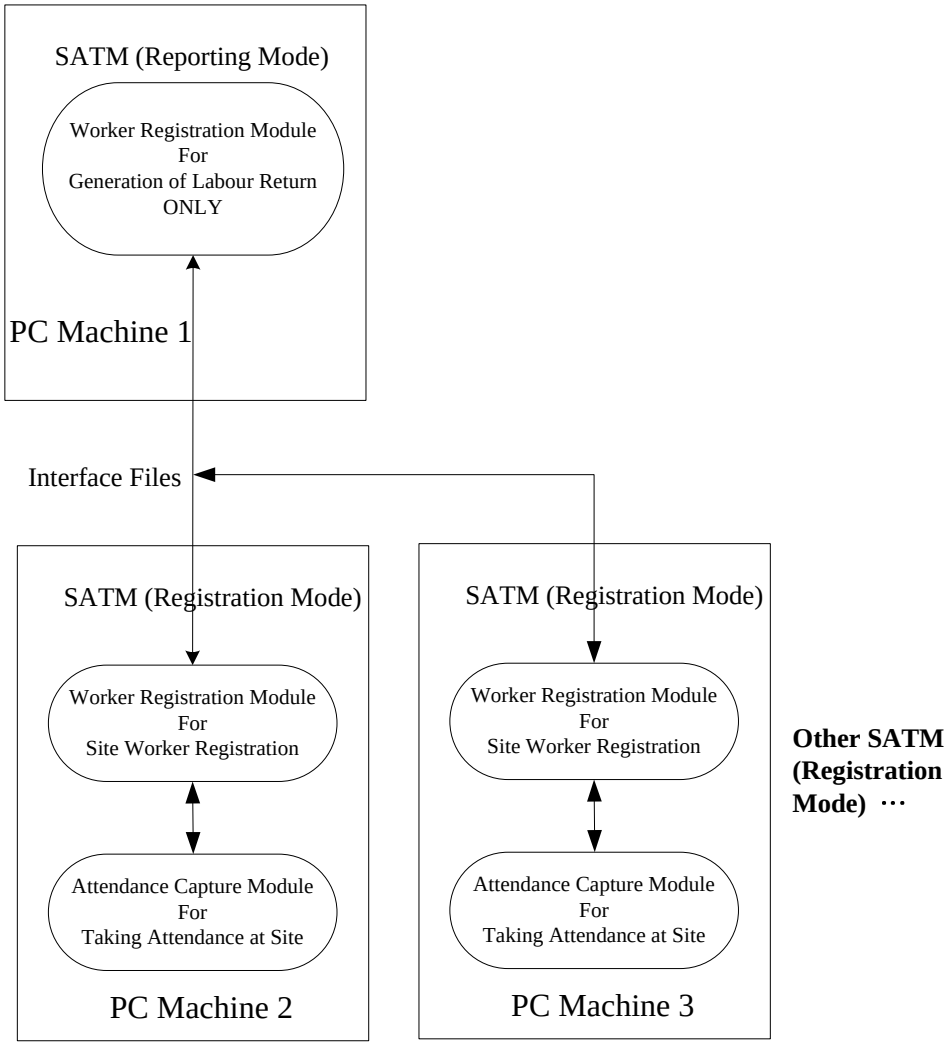


To setup the system to run in the Normal Mode, user needs to select the Normal Mode operation mode on the first logon to the SATM program. Below is a sample screen:

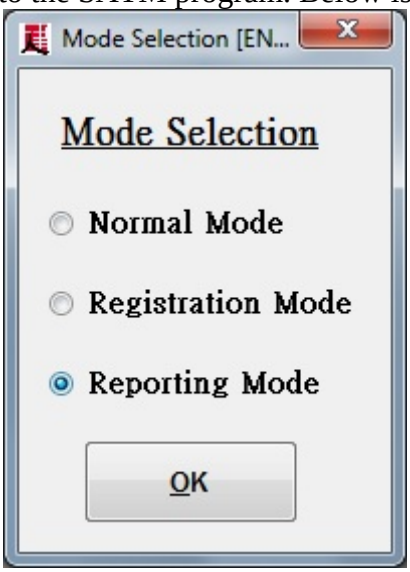


7.1.3 Distributed Setup

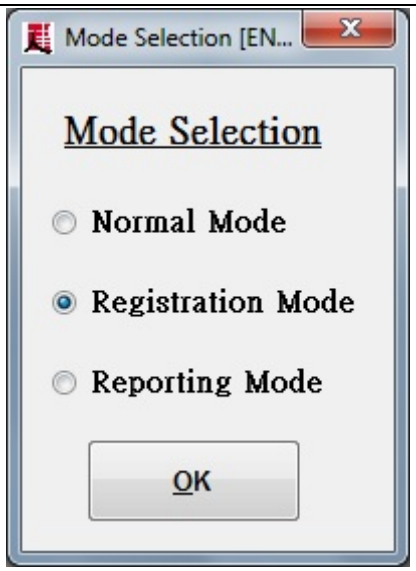
This SATM distributed setup type allows user to setup a single centralised machine that will perform the Labour Return Generation centrally. However, the site worker registration and attendance capturing functions may be setup in different machines at different site. This setup type is suitable for construction contract that has many sites located across different geographical location. It allows different site staff to register only their corresponding workers and take attendance. All sites' registration and attendance records can then be synchronise back to the central reporting machine for the preparation of the Labour Returns. Below is a summary diagram of the setup:



To setup the above setup scenario, the "PC Machine 1" machine needs to select the Reporting Mode operation mode on the first logon to the SATM program. Below is a sample screen:



As for the "PC Machine 2" & "PC Machine 3" machines, user needs to select the Registration Mode operation mode on the first logon to the SATM program. Below is a sample screen:

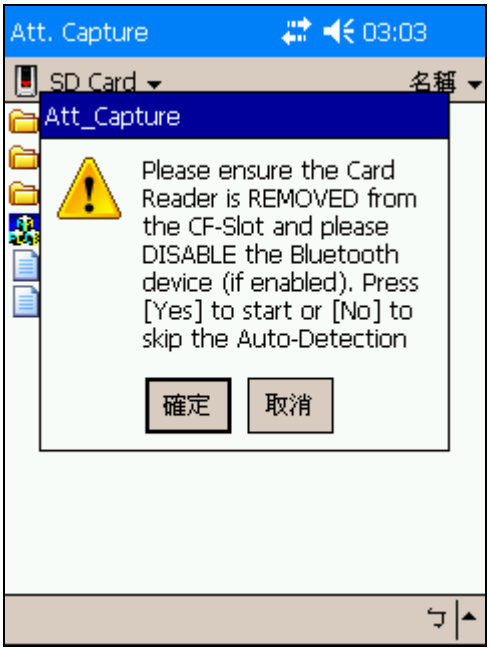

Mode Selection [EN...
Mode Selection
Normal Mode
Registration Mode
Reporting Mode
OK

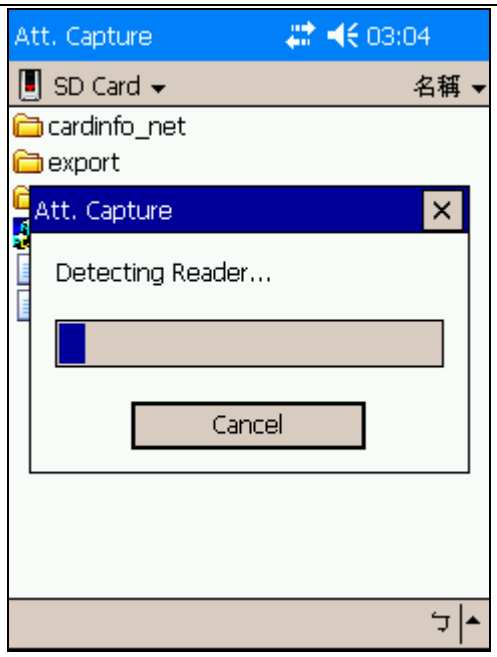
8 Appendix D – PDA Attendance Capture Function

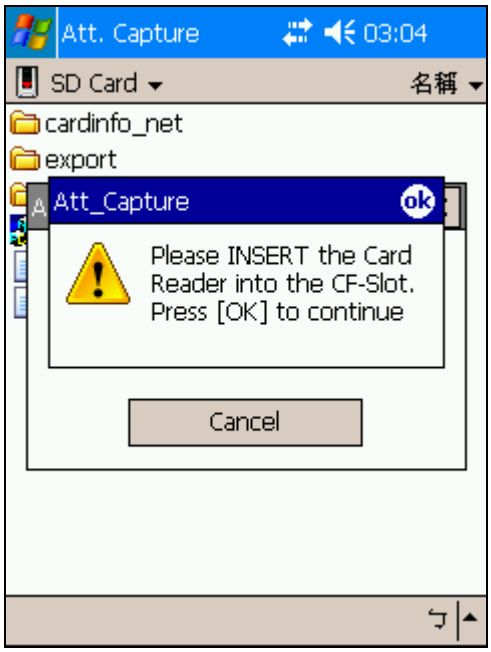
8.1 Logon to Attendance Capture Module in PDA

- Before starting the PDA Attendance Capture program, ensure that the below required interface files exported from SATM (Full Version) [refer to section: 3.2.5 Export Access Control List & Worker Registration Record] are copied to the appropriate location:
    1. \[SD Card Root]\import\access_control.txt
    2. \[SD Card Root]\import\worker_detail.txt
    3. \[SD Card Root]\import\worker_trade.txt
    4. \[SD Card Root]\import\MESSAGE.txt

- At the SD Card root directory, click the Att_Capture.exe to start the program.
- For the initial use of the program, it will prompt for the setup of the reader. Follow the instruction to setup:

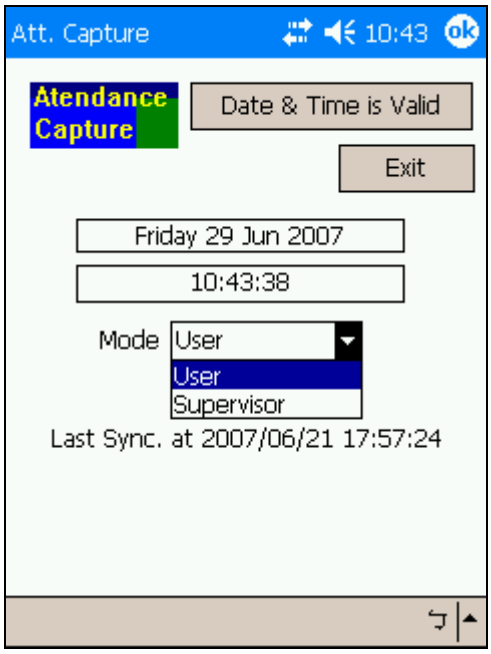



Att. Capture
03:04
SD Card
名稱
cardinfo_net
export
Att. Capture
Detecting Reader...
Cancel


Att. Capture
03:04
SD Card
名稱
cardinfo_net
export
Att_Capture
ok
Please INSERT the Card Reader into the CF-Slot. Press [OK] to continue
Cancel

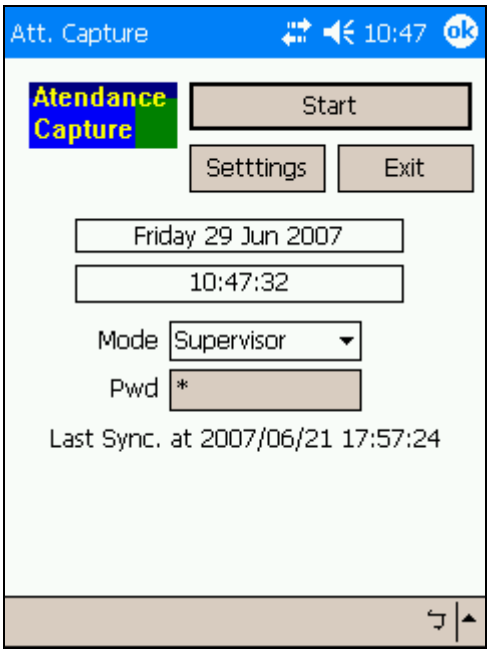
**** Note: During initial setup of the CF reader, other devices such as Bluetooth may be called by the program. Just click ok or exit to exit the called up programs.***

- On the startup screen, select "Mode" to *User* for simply capturing function or *Supervisor*.

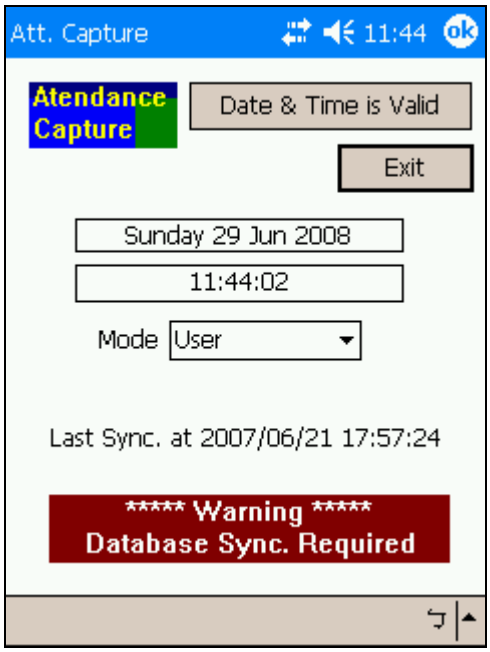


- For *User* mode, user(s) should verify the system date and time in the PDA. If validated, click "Date & Time is Valid" button and "Start" button to start the worker's card capturing function. Without verification, the system may return incorrect attendance records.
- For *Supervisor* mode, user(s) verifies the system date and time in the PDA and necessary to enter the password (default password is '1') before click "Date & Time is

Valid" button. In the functional screen, user(s) can select "Start" button to begin capturing function or "Settings" to modify the system parameters.

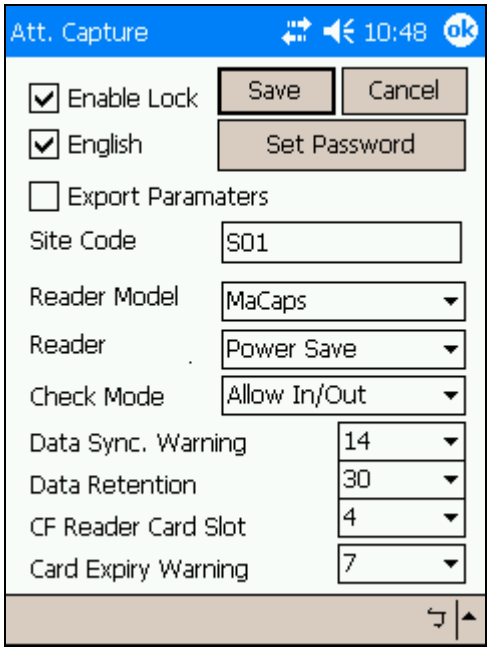


- Click "Exit" button to exit the system.



- If the worker's information does not synchronize over a period of days, the warning message "Database Sync. Required" will display on the screen and inform user(s) to update the database.
- The period of days for the warning message can modify by supervisor in the "Settings" screen.

8.2 Attendance Capturing Settings



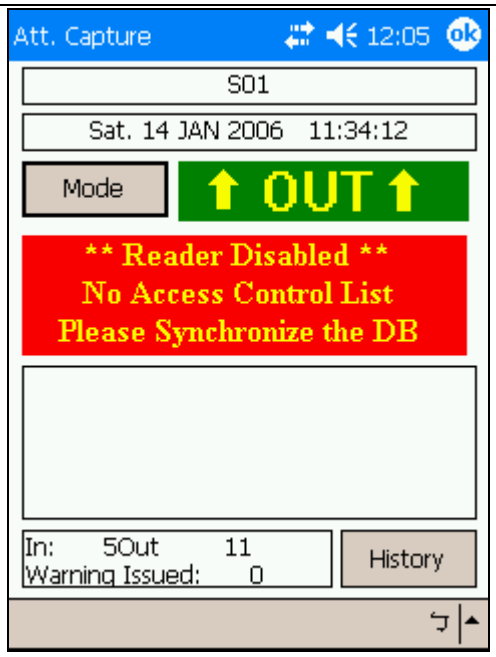
- This function is designed for changing the system parameter and only available to *Supervisor* mode.
- Click "Settings" button in the supervisor's functional screen.
- The system will compare the modified date from the file "param" in the SD card (if inserted) and the date of current settings. If the file "param" is later than the system, confirmation dialogue will display for importing the parameters from the file.
- The details for settings are described in the table below:

Parameter Name	Default Value	Usage
Enable Lock	Uncheck	To lock the PDA in the Attendance Capturing System from accessing other applications or functions.
English	UnCheck	The system displays will be English if checked and Chinese if unchecked.
Export Parameters	Uncheck	The setting parameters will export into the file "\[SD Card Root]\export\param.txt" automatically in the inserted SD card. User(s) can distribute the identical parameters for multiple PDAs.
Site Code	Site ABC	The site code of the PDA. This site code should correspond to the site code defined in the SATM

		program.
Reader Model	MF-10CF	Choose the supported reader model from the list that corresponds to the inserted reader.
Reader Operation Mode	Power Save	System is available to control the Compact Flash (CF) Card Reader into “”Always On” or “Power Save” mode. With using “Power Save” mode, system will turn off the CF Card Reader automatically after 20 seconds idle period. User(s) can re-activate it by pressing the button “Re-Start Reader” on the screen.
Check Mode	Allow In/Out	Configure the system of the PDA to be “In”, “Out”, or both directions for capturing worker(s). Meanwhile, CF Card Reader can set as disabled status.
Data Sync. Warning	14	System will display warning message after the period of days without update of the import interface files
Data Retention	30	The days keep the record(s) in the system.
CF Reader Card Slot	Nil	Assign the CF slot for the Card Reader in the PDA. Choose Nil to auto detect the correct port.
Card Expiry Warning	7	Days to display warning message before the Worker Registration Card expired.
Set Password	N/A	User(s) can set the password for *Supervisor* mode.
Save	N/A	Save button to save the parameters.
Cancel	N/A	Ignore the changes made to the parameters.

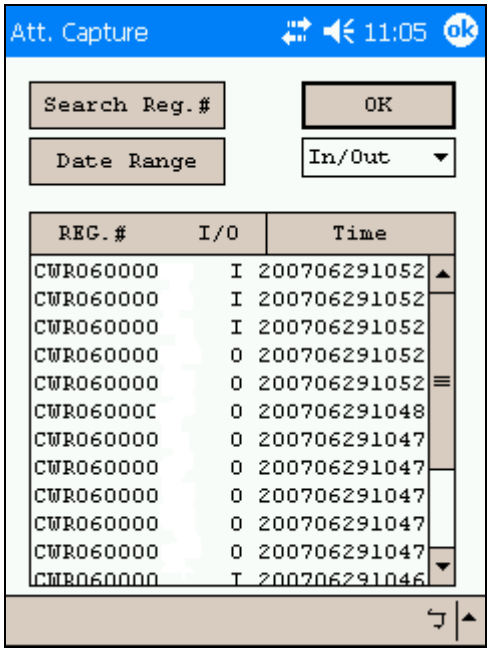
8.3 Attendance Capturing

8.3.1 Workers’ Attendance Capturing



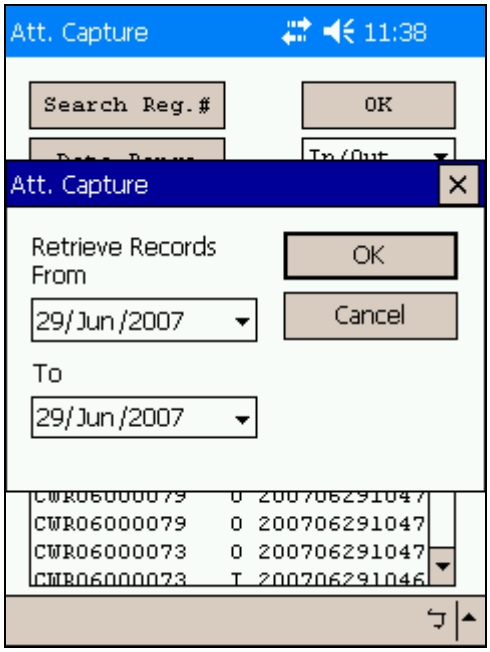
- Capturing function will be disable if one of the following issues occurred:
  - Missing database files in the SD card
  - SD card is not inserted or inserted improperly
  - CF Card Reader is missing or inserted improperly
- Click “Mode” button on the screen to switch the capturing direction between “In” and “Out”. If the system only assigned to be one direction (“In”/”Out”), this button will be disabled.
- If the system sets the “Check Mode” as “Disabled” in Settings screen, the Attendance History screen will display directly instead of attendance capturing screen after “Start”.

8.3.2 Attendance Records List



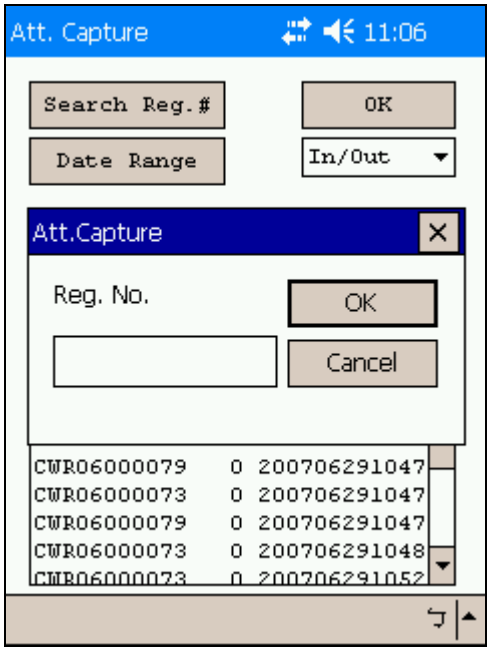
- In Attendance Capturing screen, click “History” button to access attendance records list.
- This function is designed for displaying the workers’ attendance record(s) in the current date.
- The results can display for both directions, only “In” or “Out” direction by selecting the direction combo box to filter.

8.3.3 Attendance Records By a Date Range

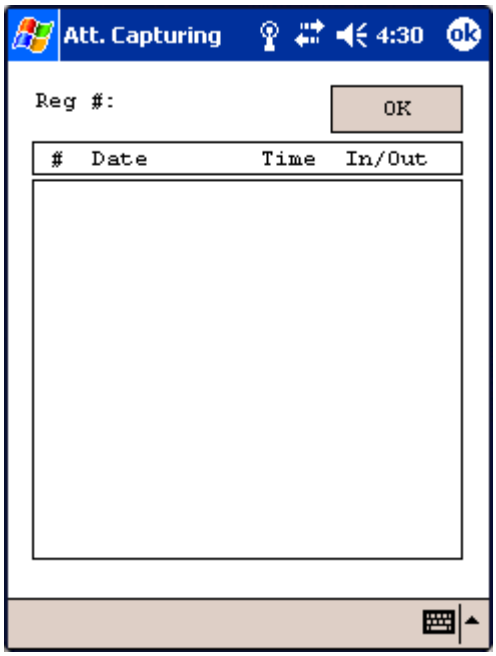


- Click “Date Range” button to open for setting the range of attendance date.
- After setting the range, press “OK” button and the system will display the results by filtering out the records beside the date range.
- The result(s) can only display the records with selected direction.

8.3.4 Search Attendance Records by Worker Registration Number



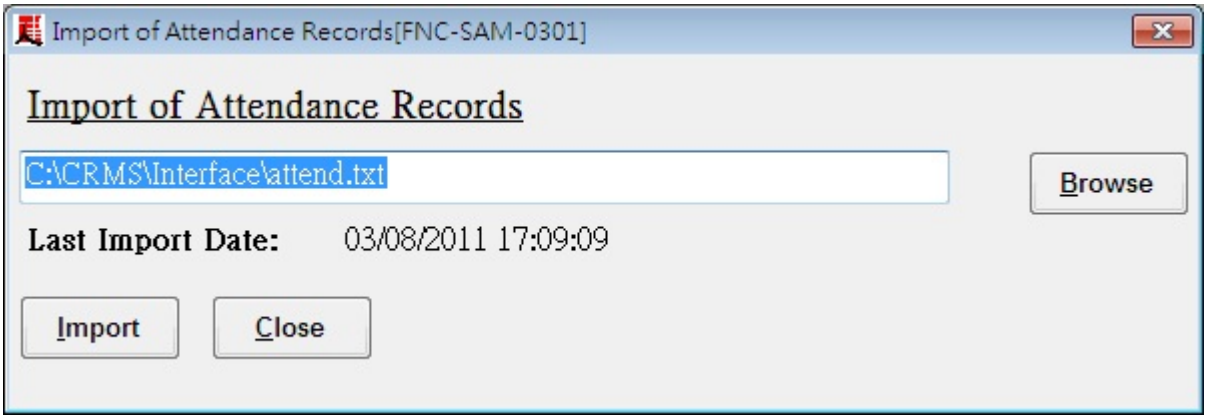
- Click “Search Reg. #” button to open the corresponding dialogue, and user(s) can prompt in the worker registration number as searching criteria.
- Click “OK” button and the system will display only the results for the selected registration number.
- The result(s) can only display the record(s) with the selected direction.



- Click “OK” button to return the Attendance History screen.

8.3.5 Upload of PDA Attendance Records to SATM

- The Attendance Records captured by the PDA is located in the file "\[SD Card Root]\Export\Attendance_list.txt".
- To upload the attendance records to SATM, user simply move the above Attendance_list.txt file from the SD Card to the SATM default interface directory (i.e. C:\CRMS\Interface).
- User then login the SATM Worker Registration Module and click the menu items: ***Interface → Import → General → Import of Attendance Records***



- Click the Browse button to select the PDA attendance record file (i.e. Attendance_list.txt).
- Click Import to import the records.

9 Appendix E –Web Submission of Labour Returns via CWRA Web Portal

9.1 Overview

Although the full version of SATM has built-in mechanism for submission of the Labour Returns to CWRA web portal, there are situations where users need to submit the Labour Returns directly to the CWRA web site. Below are 2 examples where user needs to submit the Labour Returns directly to CWRA web portal:

1. SATM machine does not have internet connectivity.
2. The construction company uses their own computer system for the generation of the Labour Returns.

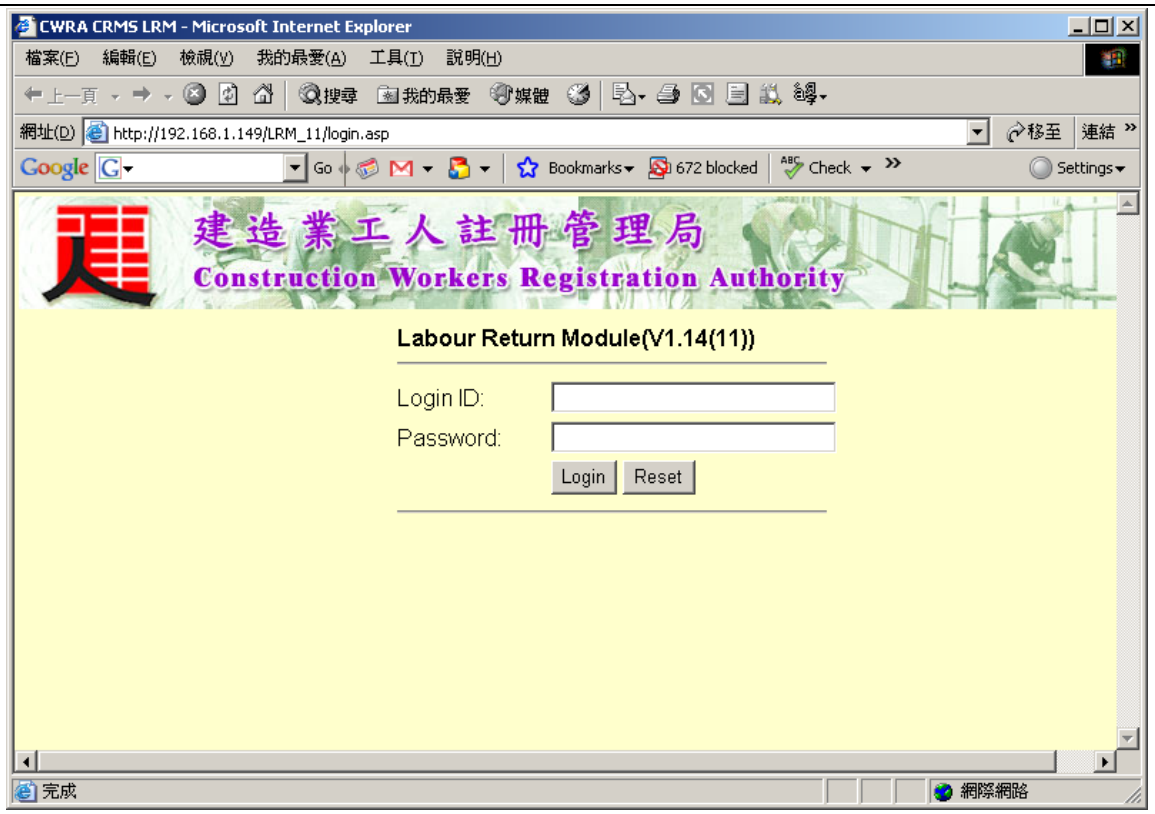
The following sub-sections describe the functions available to user when submitting their Labour Returns.

Before using the CWRA web portal for web submission of Labour Return, Construction Company needs to apply to CWRA for the "Web Submission Administrator Account". Upon successful application, CWRA will provide an administration account for the return of Labour Submission. This account is an "Administrator" account which means that it will allow the user of this account to setup further normal "Submission" account user for the purpose of submitting Labour Return.

9.2 CWRA Web Portal – Web Submission Functions

9.2.1 Login

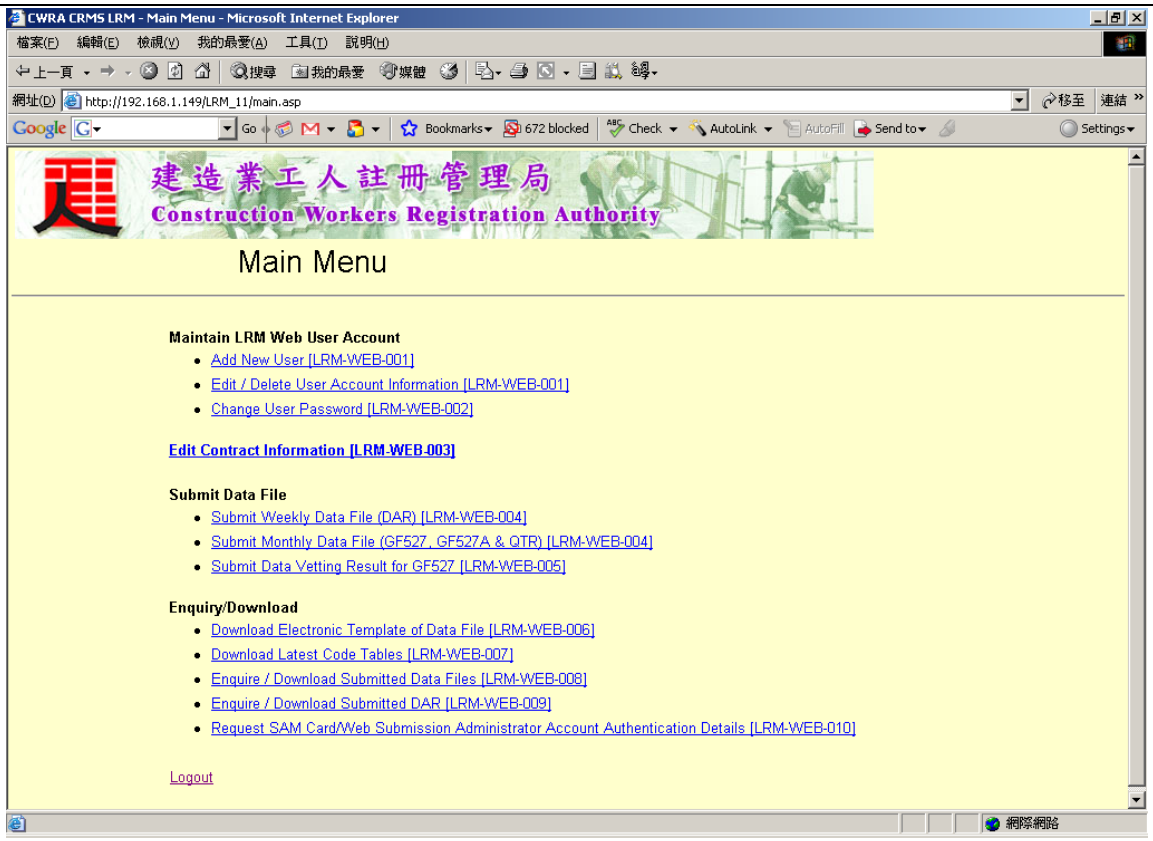
- Using a web browser (e.g. Internet Explorer), enters the web address of the CWRA web portal. The Login screens appear as shown below:



- Enters the Login ID and Password. Click Login to login the system.
- Click Reset button to reset the fields.

9.2.2 Main Menu Page

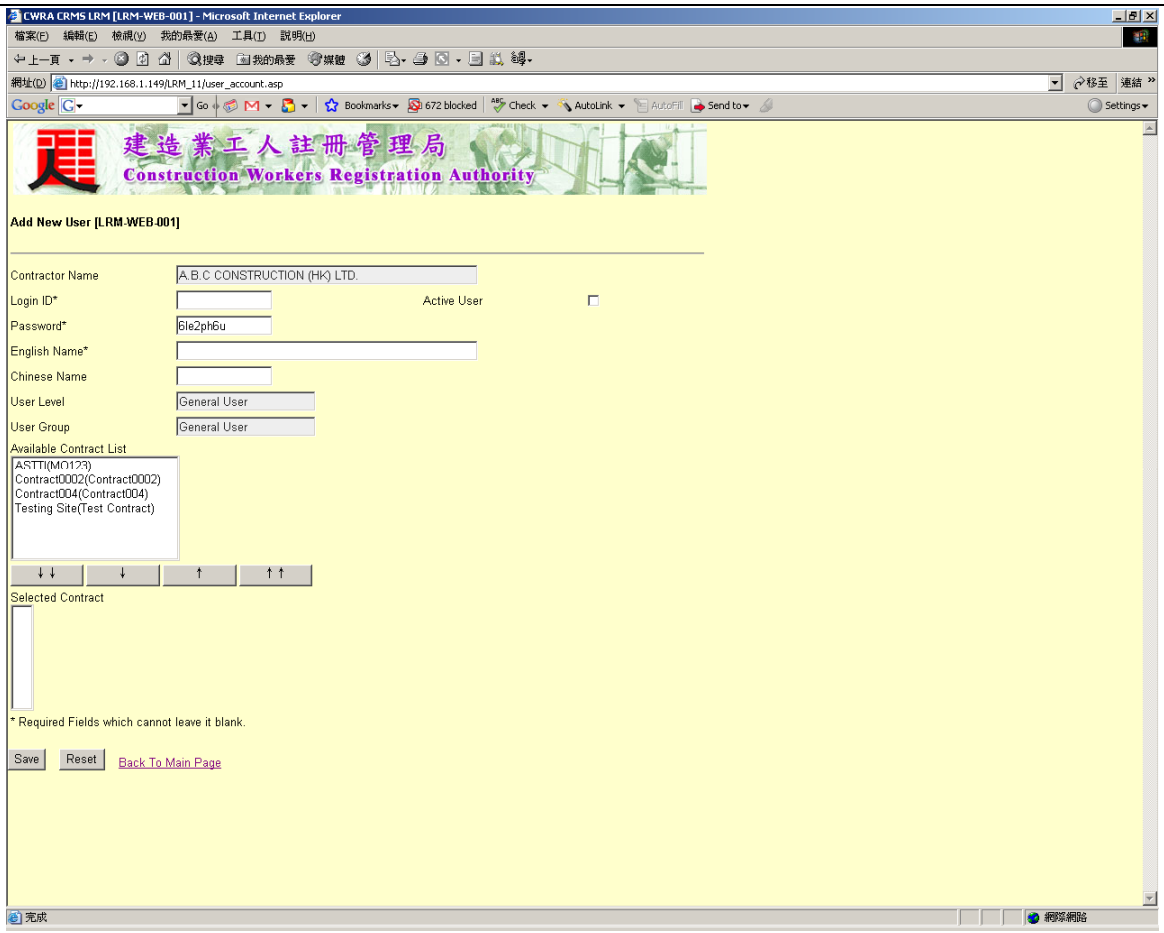
- After successfully login, the main menu appears as shown below:



- To use the function, just click on the desired function's link.

9.2.3 Add New User [LRM-WEB-001]

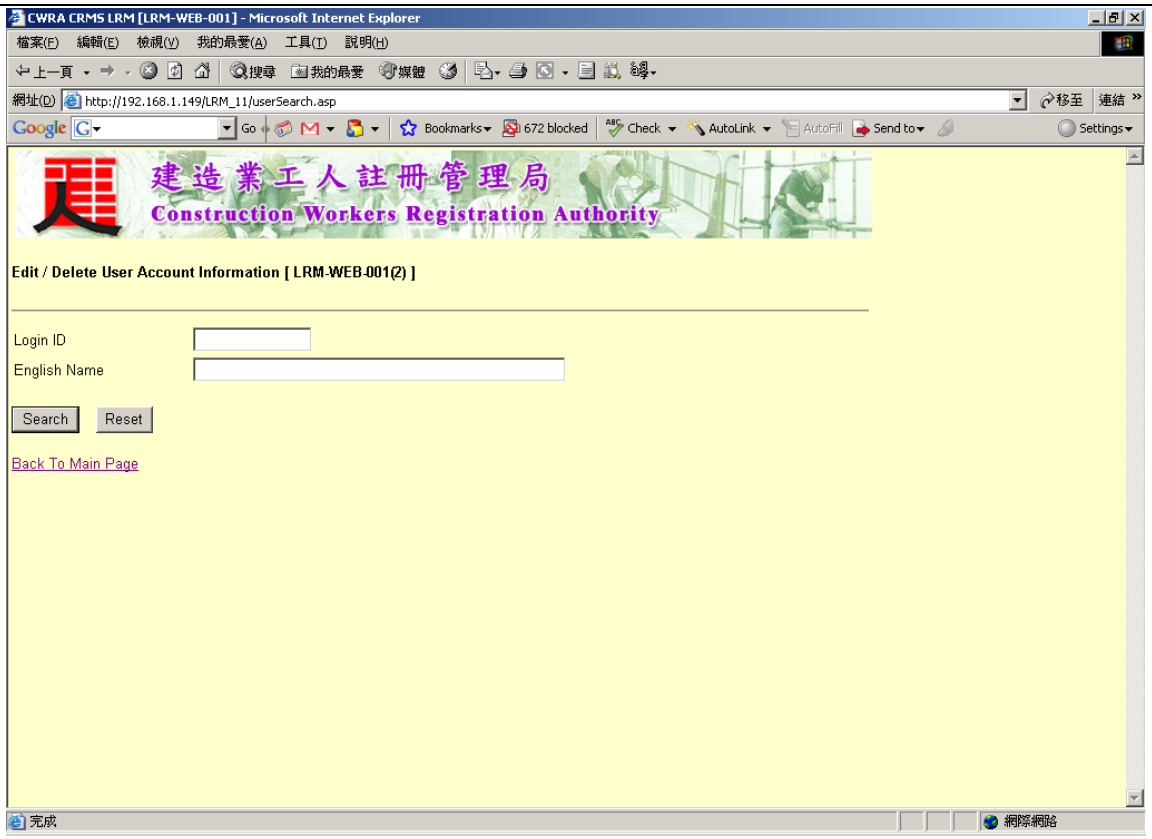
- Click the menu page link: ***Add New User [LRM-WEB-001]***



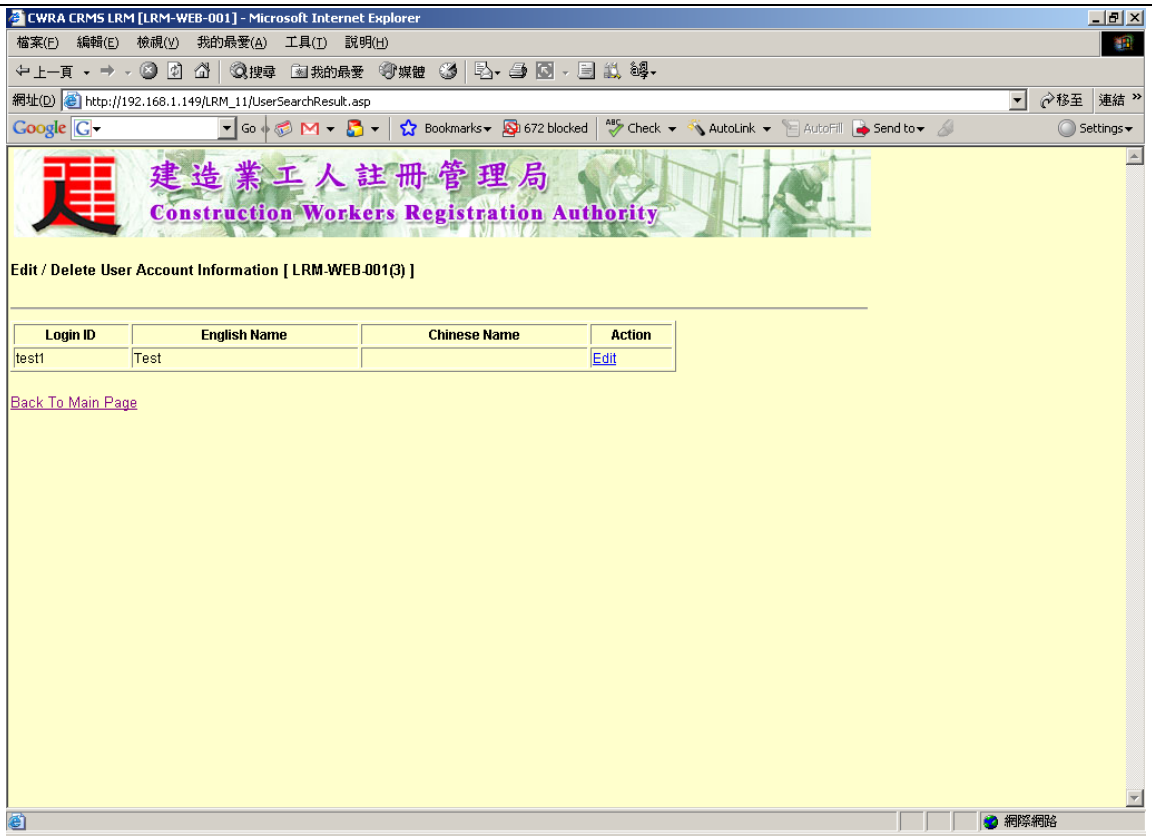
- This function allows user to add a new user account.
- Enter the Login ID, Password, English Name and Chinese Name (optional). Choose a Login ID and Password which contain not more than 8 characters. Moreover, the Login ID entered cannot exist in the system.
- To activate the new user, check the Active User checkbox.
- To assign the contract to the new user, click and highlight the contract on the available contract list.
  - Click " ↓ ↓ " to move all available contracts into the Selected Contract list and Click " ↓ " to move all highlight available contracts into the Selected Contract list.
  - Click " ↑ ↑ " to remove all contracts from the Selected Contract list and Click " ↑ " to remove all highlighted contracts from the selected contract list.
- Click Save button to add a new user
- Click Reset button to reset the form.
- Click the link "Back to Main Page" return to Main Menu Page without changes.

9.2.4 Edit/Delete User Account Information [LRM-WEB-001]

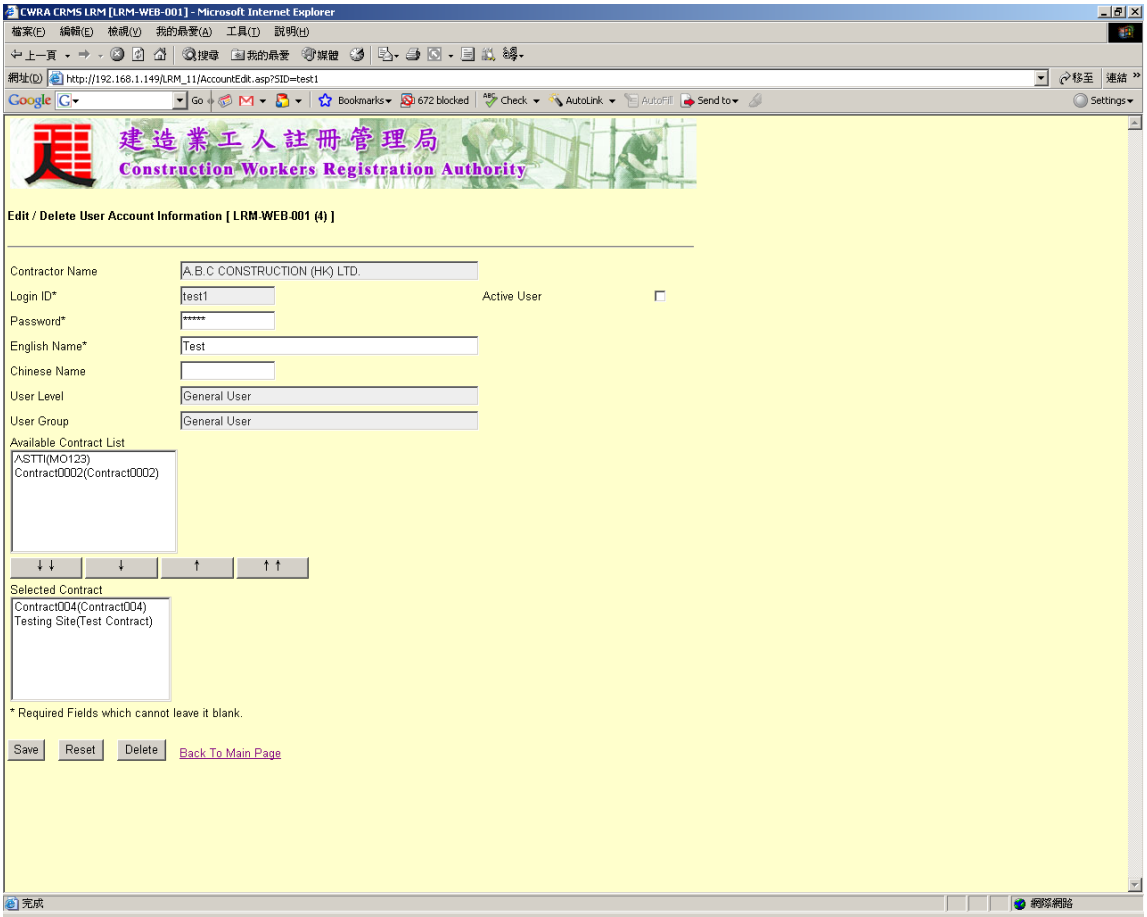
- Click the menu page link: ***Edit/Delete User Account Information [LRM-WEB-001]***



- This function allows user to edit or delete the selected user account.
- Click Reset button to reset the fields.
- Click the link "Back to Main Page" return to Main Menu Page
- Enters the Login ID or English Name of as the searching criteria. Click Search to find the user. The Searching results appear as shown below:



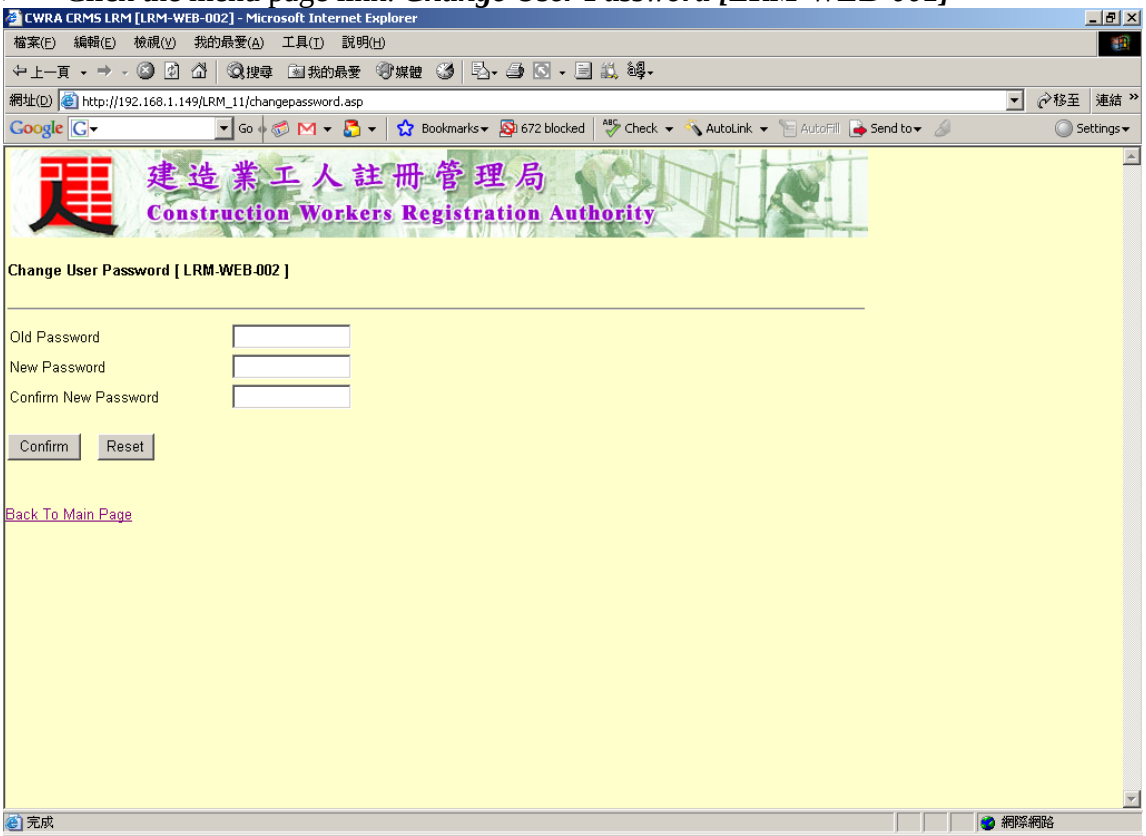
- To edit or delete an existing user, click on the desired link on the Action Column
- Click the link "Back to Main Page" return to Main Menu Page



- Edit the Login ID, Password, English Name and Chinese Name (optional).The Login ID and Password can only contain not more than 8 characters.
- To activate the user, check the Active User checkbox.
- To assign the contract to the user, click and highlight the contract on the available contract list.
  - Click ” ↓ ↓ ” to move all available contracts into the Selected Contract list and Click “ ↓ ” to move all highlight available contracts into the Selected Contract list.
  - Click “ ↑ ↑ ” to remove all contracts from the Selected Contract list and Click “ ↑ ” to remove all highlighted contracts from the selected contract list.
- Click Save button to save the changes
- Click Reset button to reset the form.
- Click Delete button to delete the user
- Click the link “Back to Main Page” return to Main Menu Page form without changes.

9.2.5 Change User Password [LRM-WEB-002]

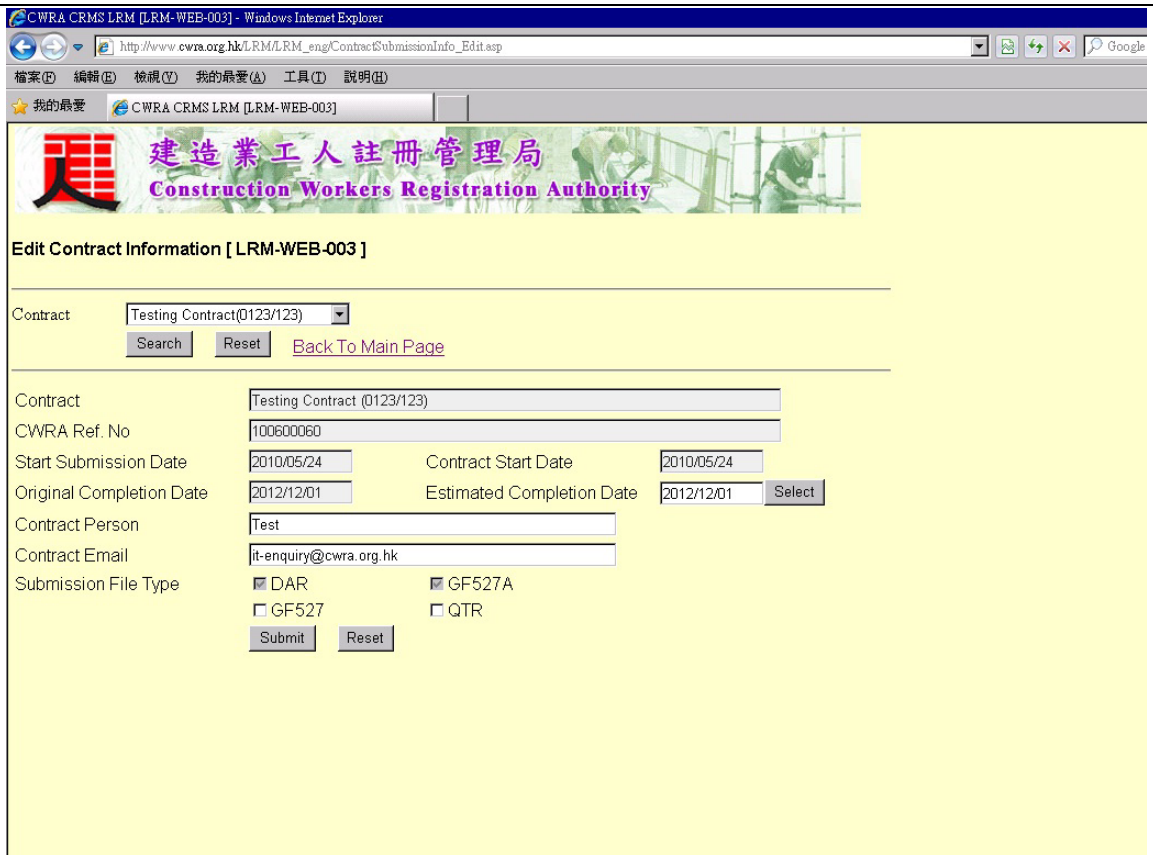
- Click the menu page link: ***Change User Password [LRM-WEB-001]***



- This function allows the user to change the account's password.
- Enter the Old Password, New Password and Confirm New Password. The new password cannot contain more than 8 characters.
- Click Reset button to reset the fields.
- Click the link "Back to Main Page" return to Main Menu Page

9.2.6 Edit Contract Information [LRM-WEB-003]

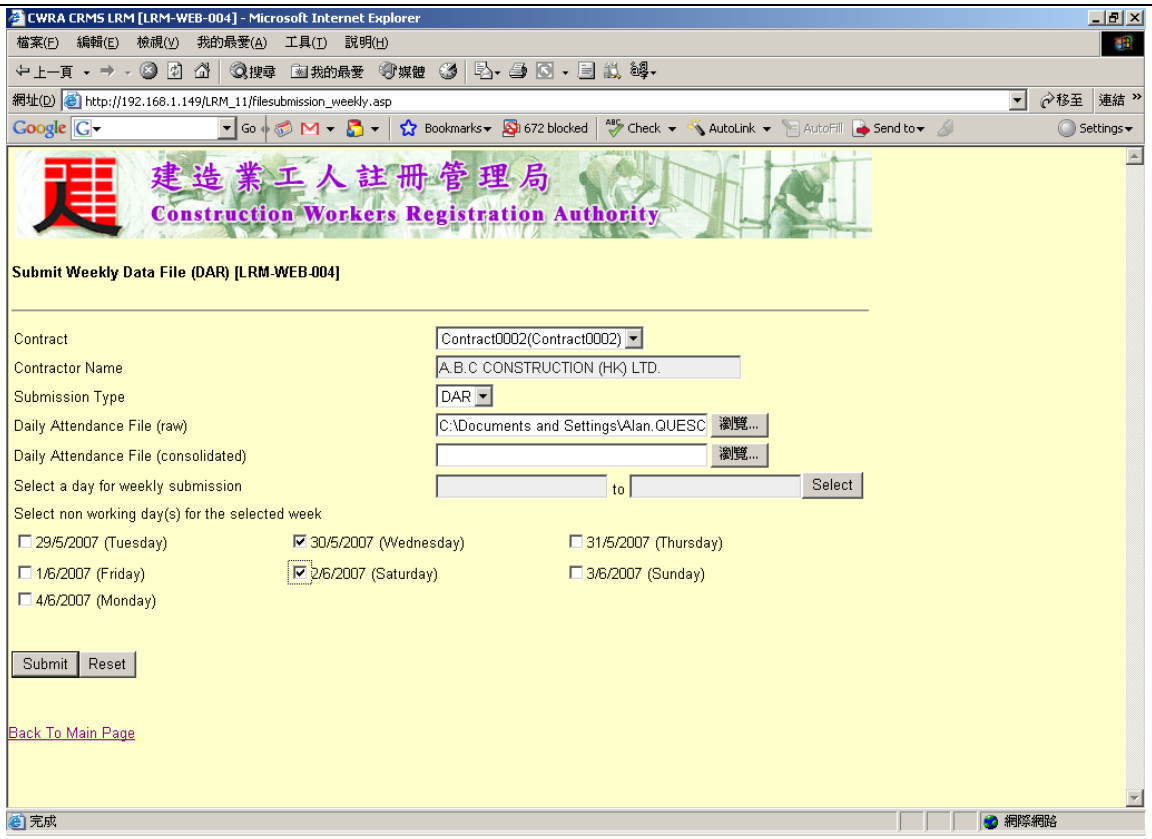
- Click the menu page link: ***Edit Contract Information [LRM-WEB-003]***



- This function allows user to set the Labour Returns required for a particular contract.
- Choose the Contract searching criteria for the desired contract and click Search button to retrieve the contract deatails. Click Reset button in the searching criteria section to reset the Contract searching field.
- The retrieved contract details will be shown below.
- User can click the Select button of the Estimated Completion Date field to update the estimated completion date of the contract.
- User can check/un-check the checkboxes for the Submission File Type field choices (i.e. DAR, GF527A, GF527, DAR).
- Click Submit to save the changes. Click Reset to undo the changes.

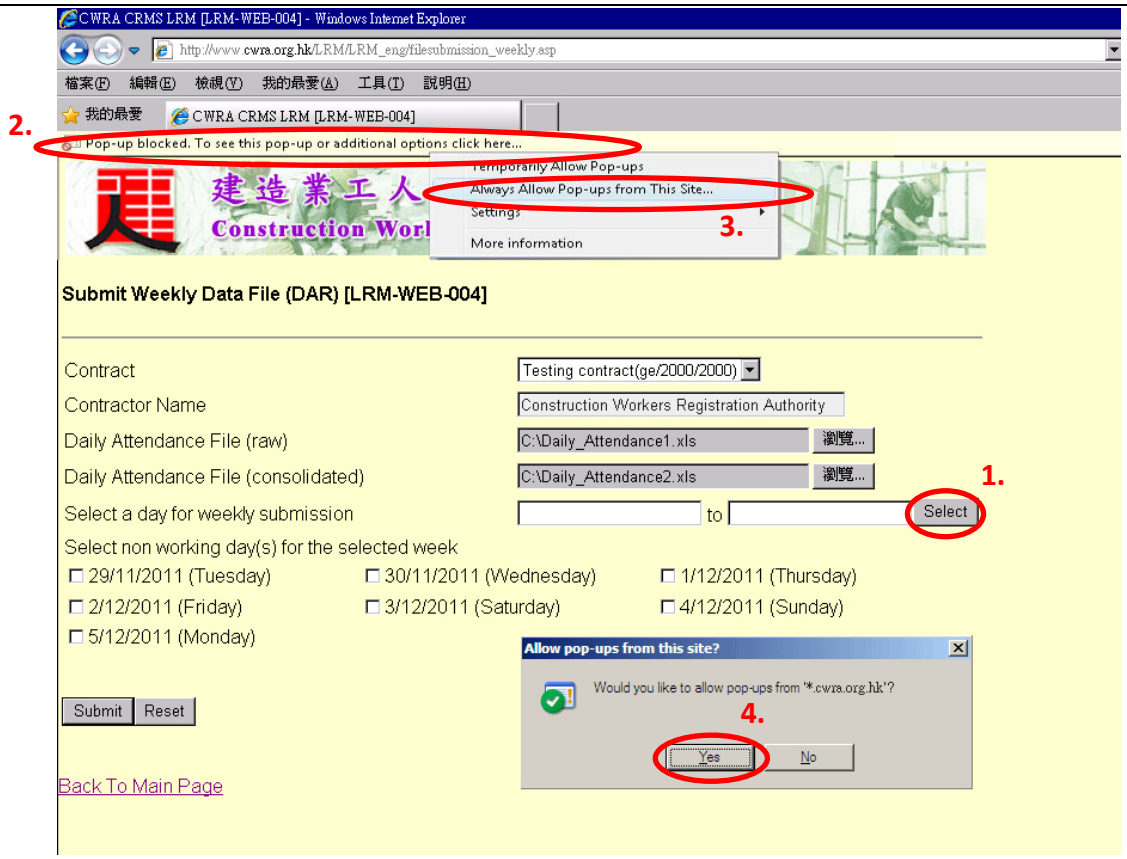
9.2.7 Submit Weekly Data File (DAR) [LRM-WEB-004]

- Click the menu page link: ***Submit Weekly Data File (DAR) [LRM-WEB-004]***



- This function allows user to submit the Daily Attendance Report (DAR) to CWRA web portal.
- Select the Contract Description from the "Contract" menu and "DAR" from the Submission Type menu.
- User can enter the path of the DAR report you want to submit or click "Browse" button to locate it. For each submission, user should submit the Daily Attendance File (raw) or Daily Attendance File (consolidated). If the user want to submit the Daily Attendance File (consolidated), he should submit the Daily Attendance File (raw) at the same time.
- Click "Select" under "Select a day for weekly submission", a pop-up calendar is shown. Select a day for weekly submission from the pop-up calendar, the start date and end date is displayed on the field.

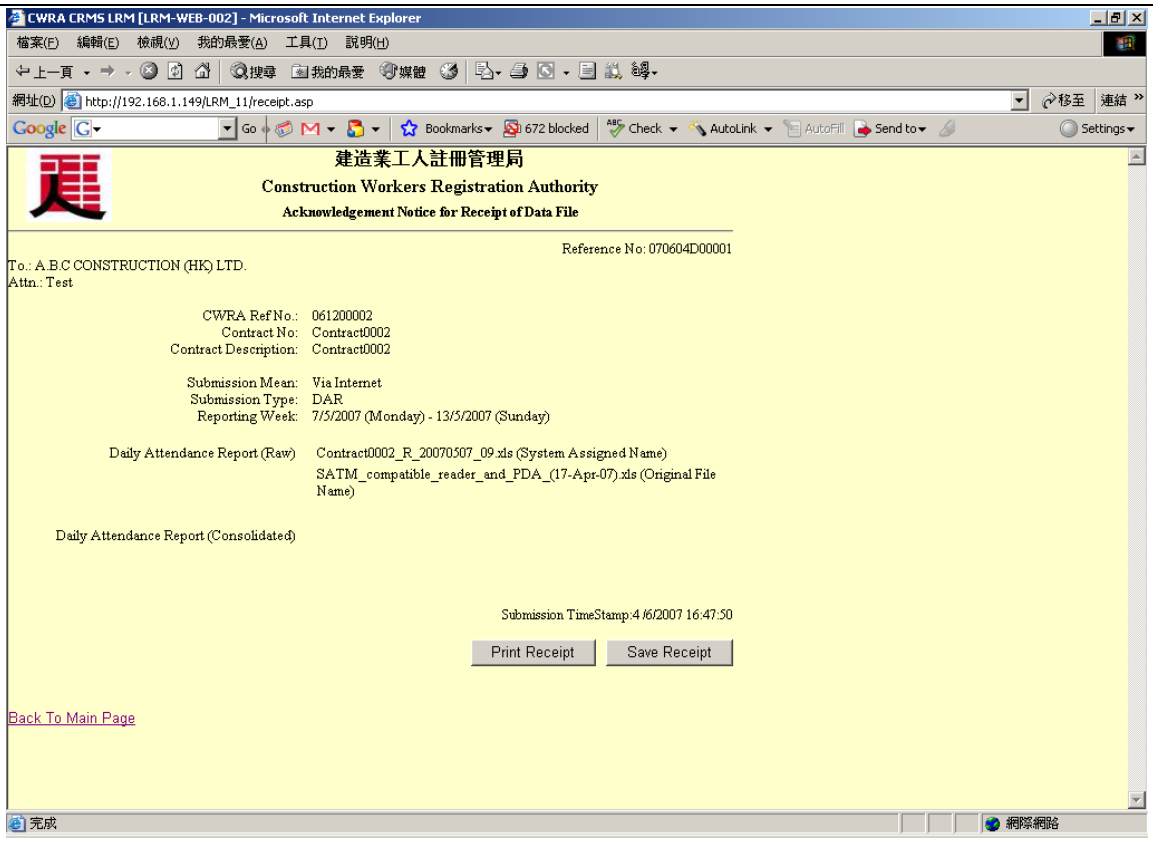
  (Important: if the calendar does not appear, it may be blocked by the internet browser. Please follow the procedures below to enable the pop-up function:



1. Click **Select**
2. Right click on the pop-up message
3. Select the option – "Always allow pop-ups from this site
4. Click "yes" to enable pop-up in this website.

- **To turn off Pop-up Blocker:**
  In Internet Explorer, click the Tools button, click Internet options, and then click the Privacy tab.
- Under Pop-up Blocker, clear the Turn on Pop-up Blocker check box, and then click OK.
- Note that not all pop-up windows can be blocked with Pop-up Blocker. Please see Internet Explorer Help for more information about Pop-up Blocker.

- Check the checkboxes of the non working day(s) under "Select non working day(s) for the selected week".
- Click "Submit" to submit the DAR to CRMS.
- Click Reset button to reset the fields.
- Click the link "Back to Main Page" return to Main Menu Page form without changes.

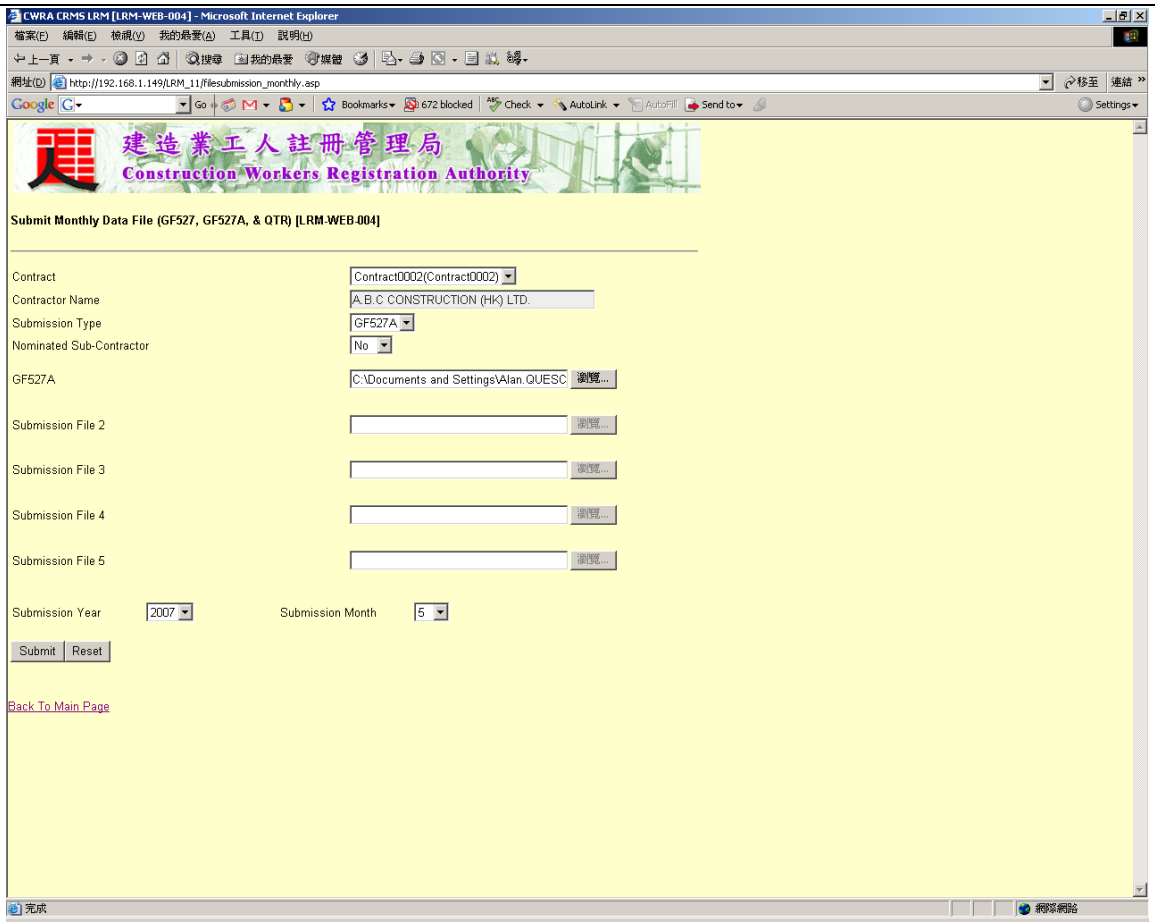


- After submission of reports, the receipt appears.
- Reference No. on the top right corner can be used for enquiry in the future day.
- Click the link "Back to Main Page" return to Main Menu Page form without changes.

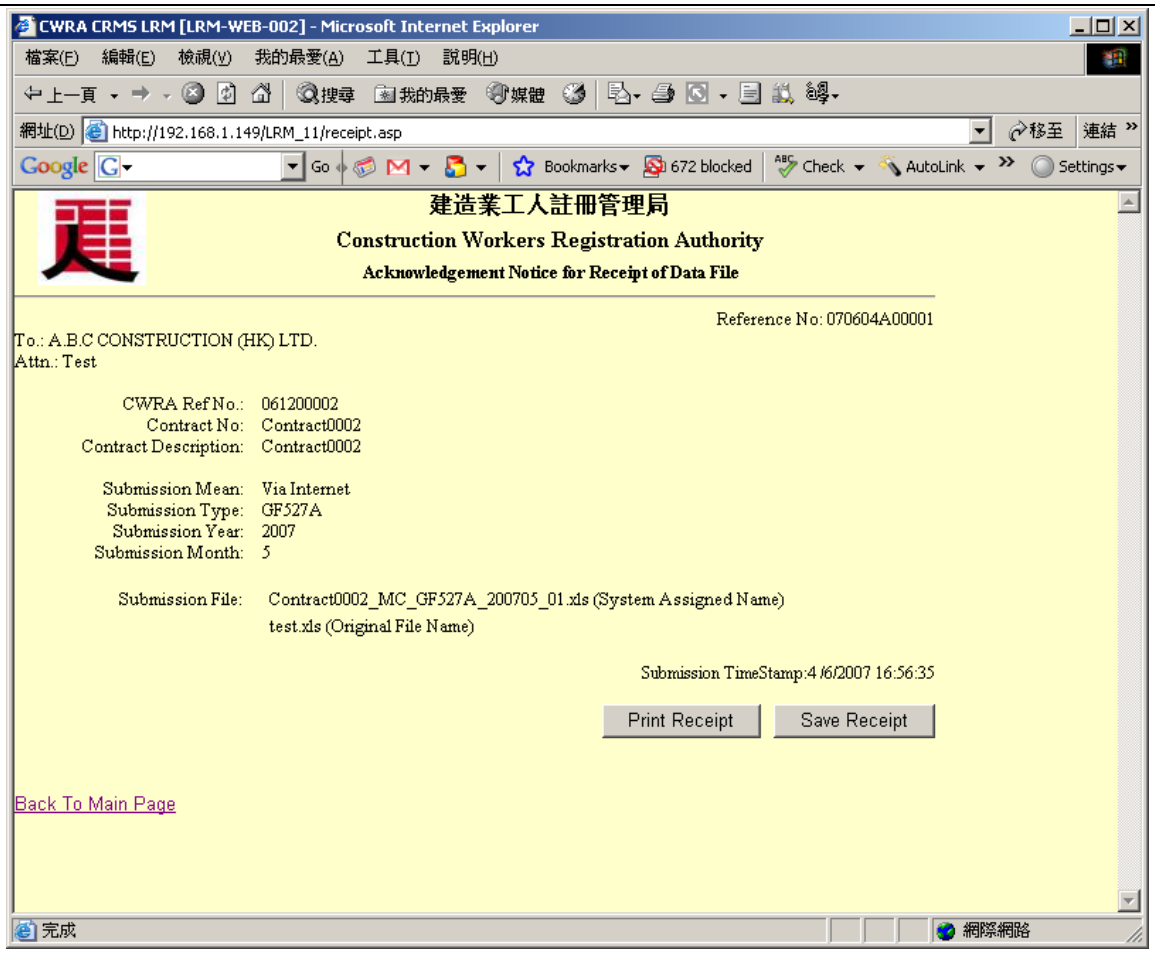
9.2.8 Submit Monthly Data File (GF527, GF527A & QTR) [LRM-WEB-004]

9.2.8.1 *Submission of GF527A*

- To submit the labour returns GF527A, click on the link "***Submit Monthly Data File (GF527, GF527A & QTR) [LRM-WEB-004]***" on Main Menu Page.



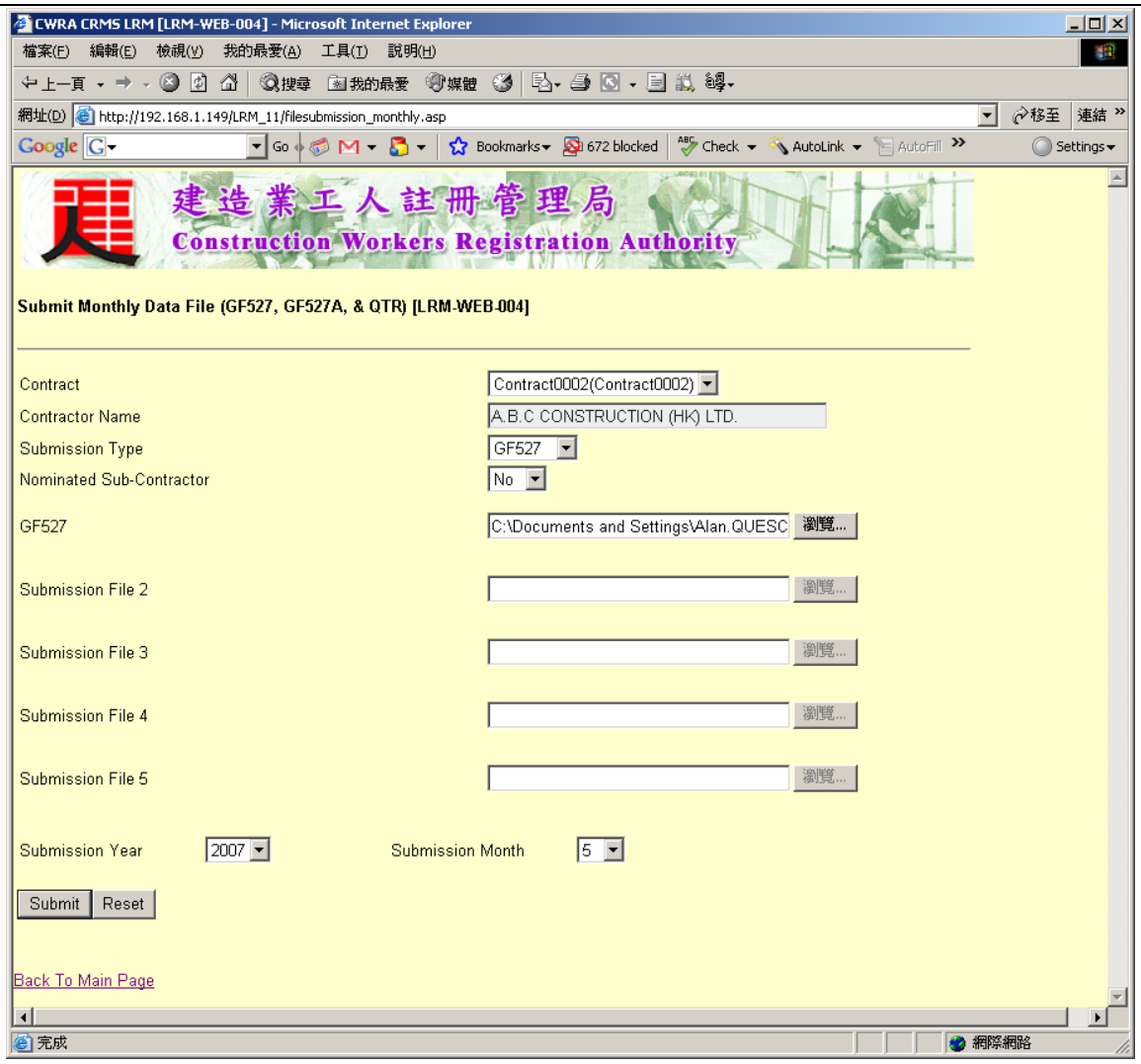
- Select the Contract Description from the “Contract” menu and Nominated Sub-Contractor from “Nominated Sub-Contractor” menu.
- Select “GF527A” from the Submission Type menu.
- User can enter the path of the GF527A report you want to submit or click “Browse” button to locate it. For each submission, user can submit not more than 5 files.
- Select the reporting year and month of GF527A from “Submission Month” menu and “Submission Year” menu.
- Click “Submit” to submit the GF527A to CRMS.
- Click Reset button to reset the form.
- Click the link “Back to Main Page” return to Main Menu Page form without changes.



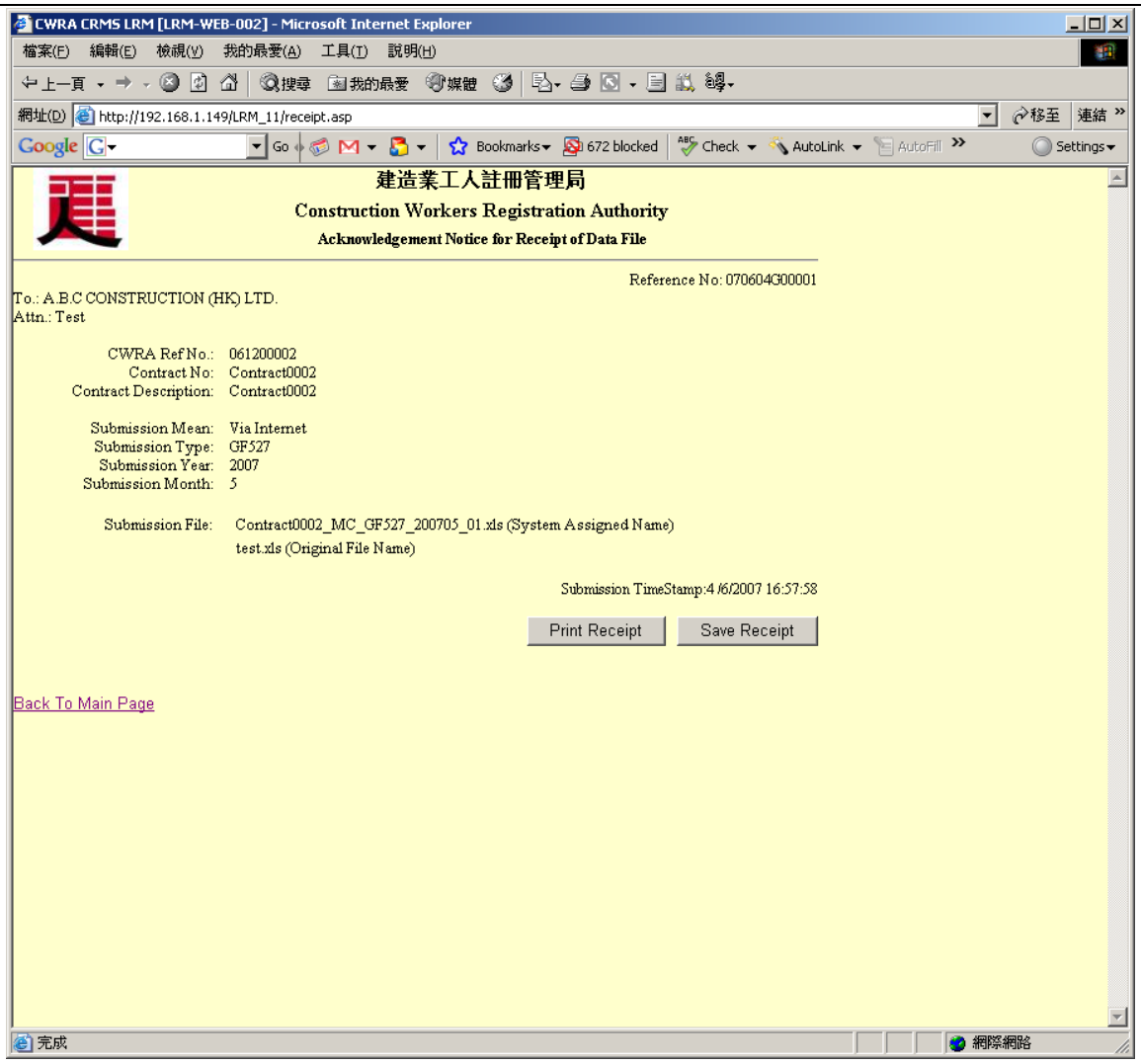
- After submission of reports, the receipt appears.
- Reference No. on the top right corner can be used for enquiry in the future day.
- Click the link "Back to Main Page" return to Main Menu Page form without changes.

9.2.8.2 Submission of GF527

- To submit the labour returns GF527, click on the link "***Submit Monthly Data File (GF527, GF527A & QTR) [LRM-WEB-004]***" on Main Menu Page.



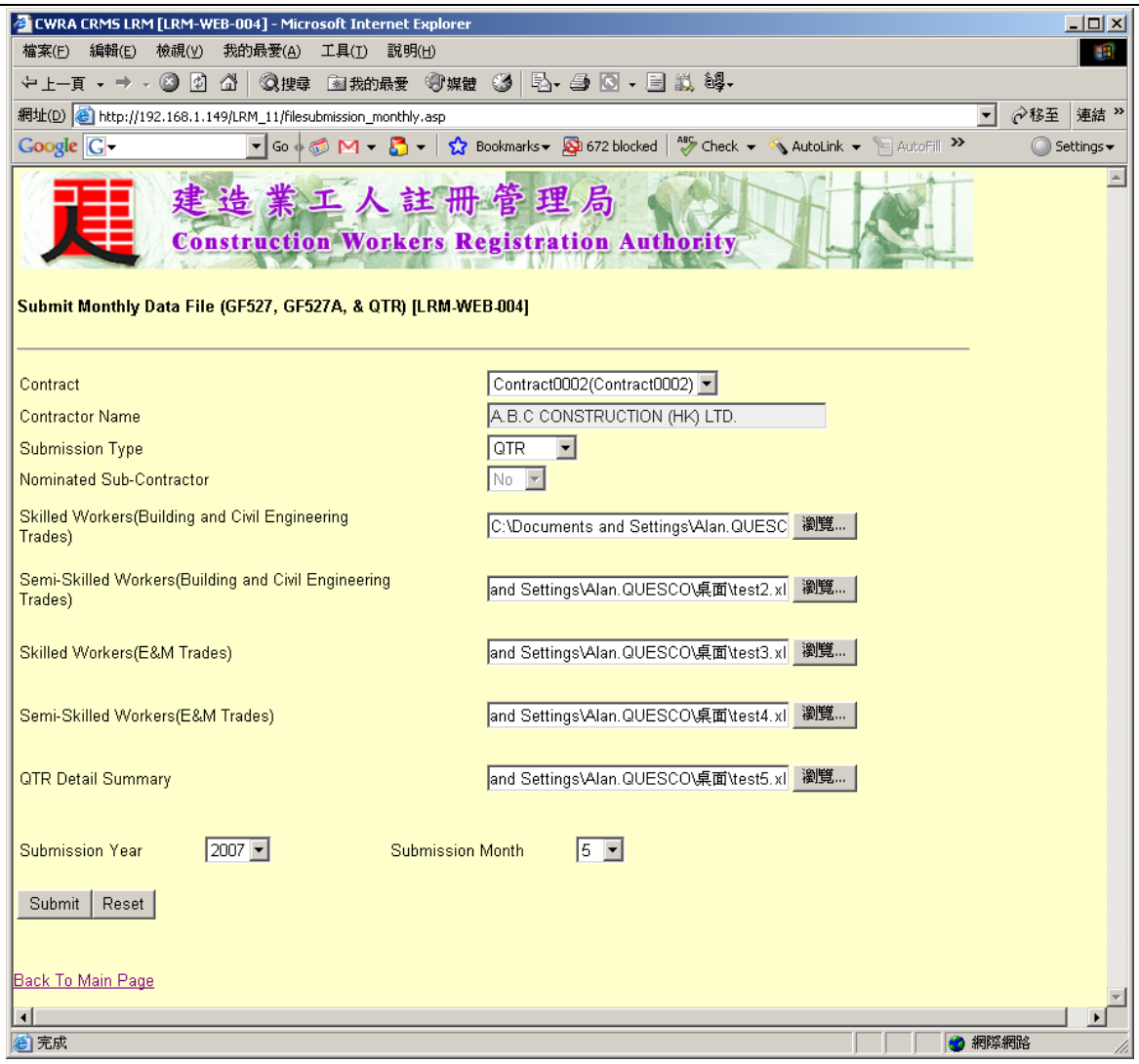
- Select the Contract Description from the “ Contract” menu and Nominated Sub-Contractor from “ Nominated Sub-Contractor” menu.
- Select “ GF527” from the Submission Type menu.
- User can enter the path of the GF527 report you want to submit or click “Browse” button to locate it. For each submission, user can submit not more than 5 files.
- Select the reporting year and month of GF527 from “ Submission Month” menu and “Submission Year” menu.
- Click “ Submit” to submit the GF527 to CRMS.
- Click Reset button to reset the fields.
- Click the link “ Back to Main Page” return to Main Menu Page form without changes.



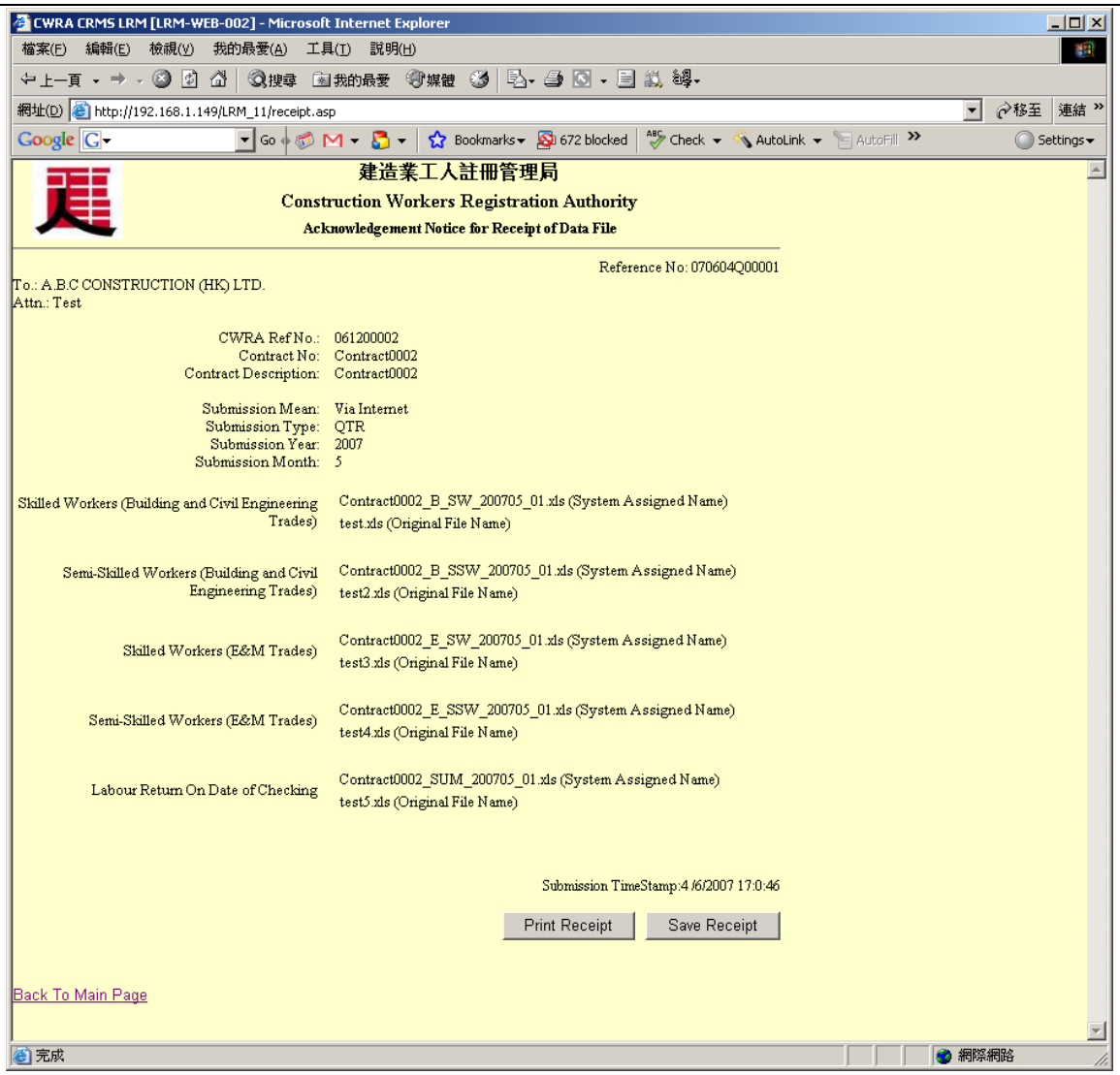
- After submission of reports, the receipt appears.
- Reference No. on the top right corner can be used for enquiry in the future day.
- Click the link "Back to Main Page" return to Main Menu Page form without changes.

9.2.8.3 Submission of QTR

- To submit the labour returns QTR, click on the link "***Submit Monthly Data File (GF527, GF527A & QTR) [LRM-WEB-004]***" on Main Menu Page.



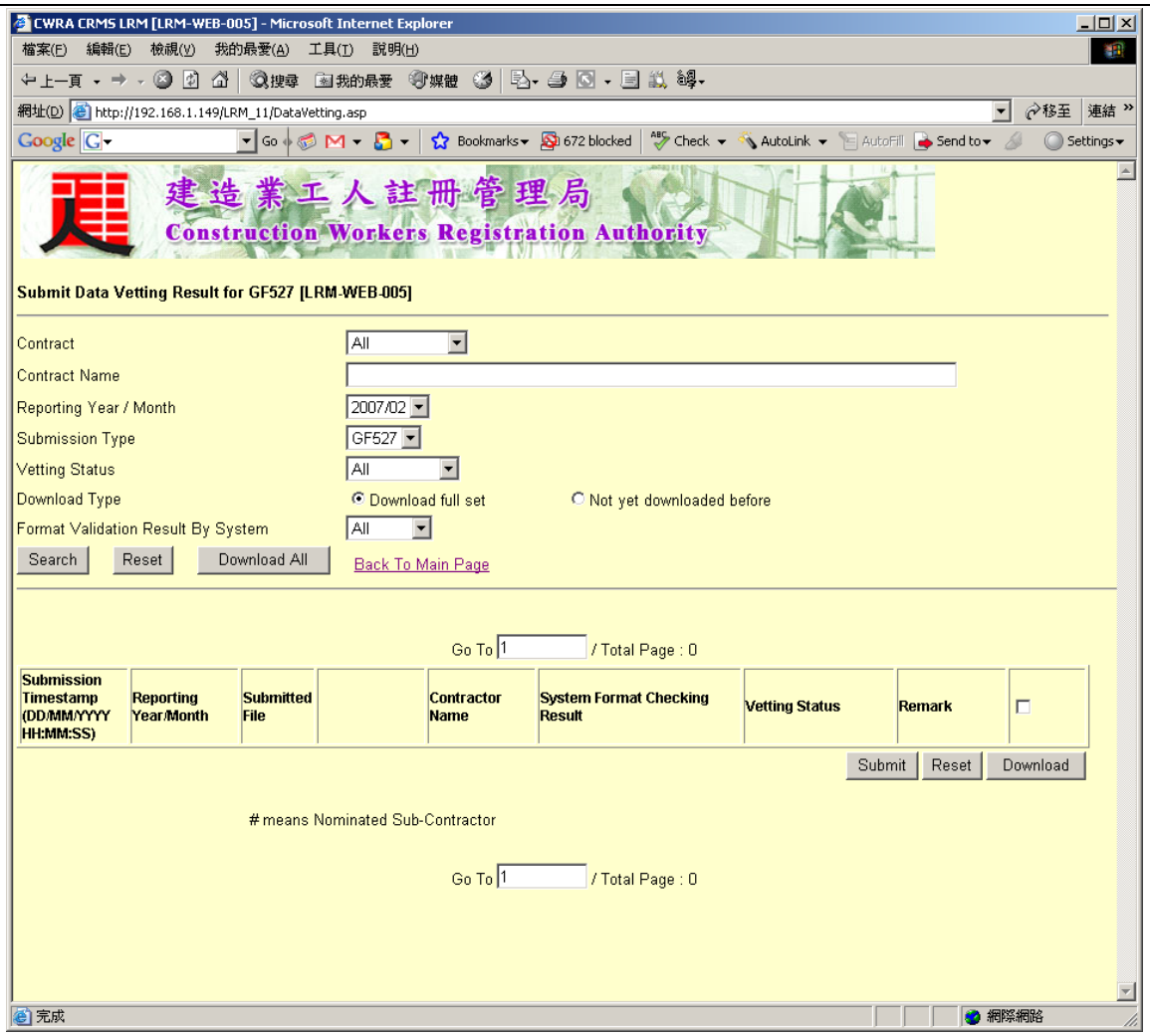
- Select the Contract Description from the “Contract” menu and “QTR” from the Submission Type menu.
- User can enter the path of the QTR report you want to submit or click “Browse” button to locate it. For each submission, user should submit the QTR Detail Summary and Name List of QTR: QTR - Skilled Workers (Building and Civil Engineering Trades), QTR - Semi-Skilled Workers (Building and Civil Engineering Trades), QTR - Skilled Workers (E&M Trades) QTR - Semi-Skilled Workers (E&M Trades).
- Select the reporting year and month of QTR from “Submission Month” menu and “Submission Year” menu.
- Click “Submit” to submit the QTR to CRMS.
- Click Reset button to reset the fields.
- Click the link “Back to Main Page” return to Main Menu Page form without changes.



- After submission of reports, the receipt appears.
- Click the link "Back to Main Page" return to Main Menu Page form without changes.

9.2.9 Submit Data Vetting Result for GF527 [LRM-WEB-005]

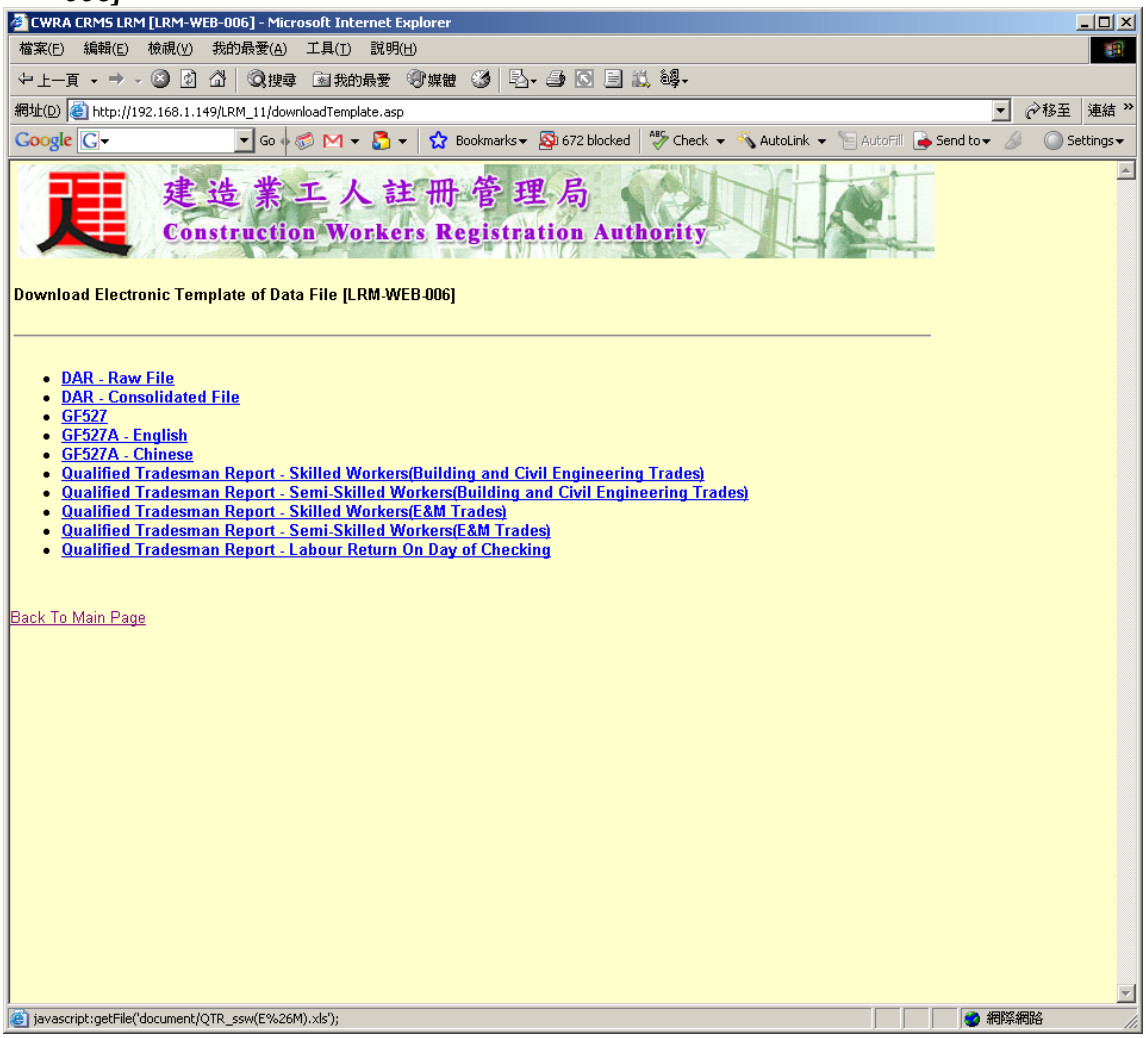
- Click the menu page link: ***Submit Data Vetting Result for GF527 [LRM-WEB-005]***



- This function allows the user to update the uploaded GF527 vetting status to Checked. For public contract, the Labour Return GF527 must be vetted by the resident engineer. When the resident engineer had vetted the GF527, contractor user need to update the status via this function. After updated the status, the system will subsequently send a notification email to the resident engineer next day to notify them this change.
- Choose the Contract, Contract Name, Reporting Year/Month, Submission Type, Vetting Status, Download Type, Format Validation Result By System criteria for the search.
- Click Search button to search based on the chosen criteria. The result will be displayed in the result table below.
- Click the Vetting Status checkbox to mark the submitted file's status. Also, user remarks may be added to the Remark field. Click Submit button to save changes. The Reset button below the result table allows user to undo the changes made to retrieved records.
- Click the Download button to download the selected file.
- Click Reset button below the searching criteria to reset the criteria fields.

9.2.10 Download Electronic Template of Data File [LRM-WEB-006]

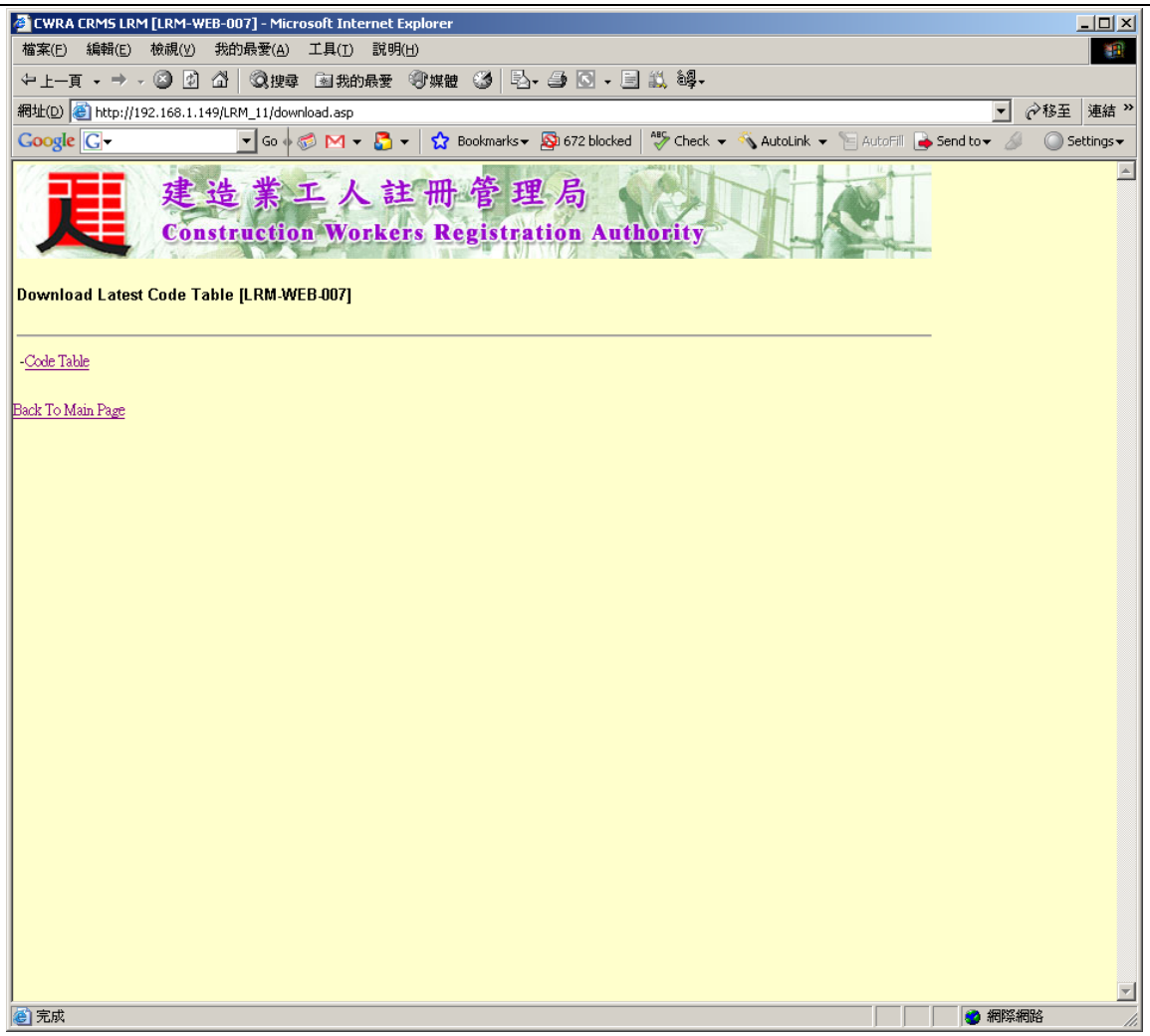
- Click the menu page link: ***Download Electronic Template of Data File [LRM-WEB-006]***



- This function allows user to download the latest Labour Return templates for their return's compilation.
- To download the document temple, just click on the desired document's link.
- Click the link "Back to Main Page" return to Main Menu Page form without changes.

9.2.11 Download Latest Code Tables [LRM-WEB-007]

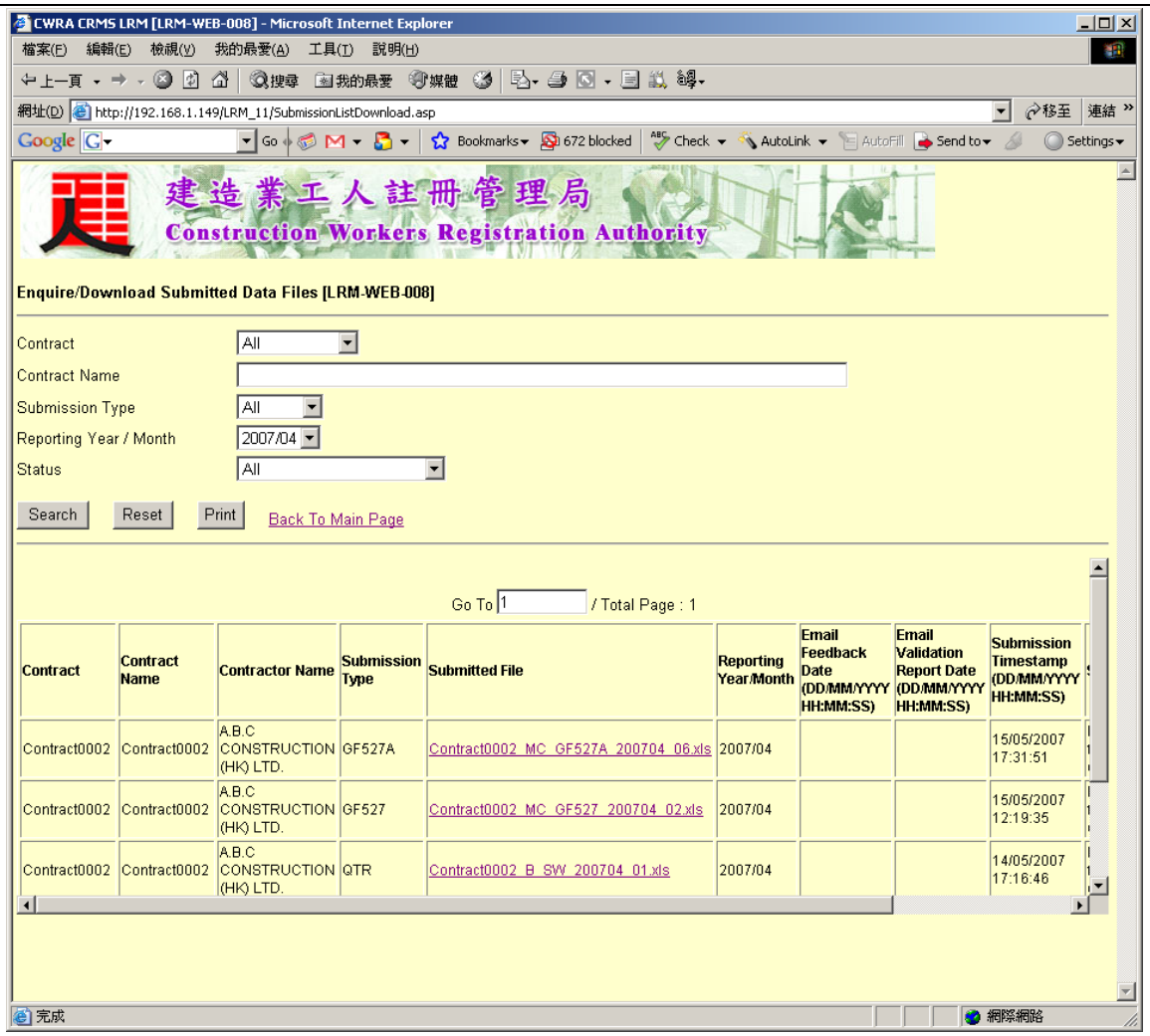
- Click the menu page link: ***Download Latest Code Tables [LRM-WEB-007]***



- This function allows the user to download the latest code reference tables for SATM program.
- To download the code table, just click on the code table link.
- Click the link "Back to Main Page" return to Main Menu Page form without changes.

9.2.12 Enquire/Download Submitted Data Files [LRM-WEB-008]

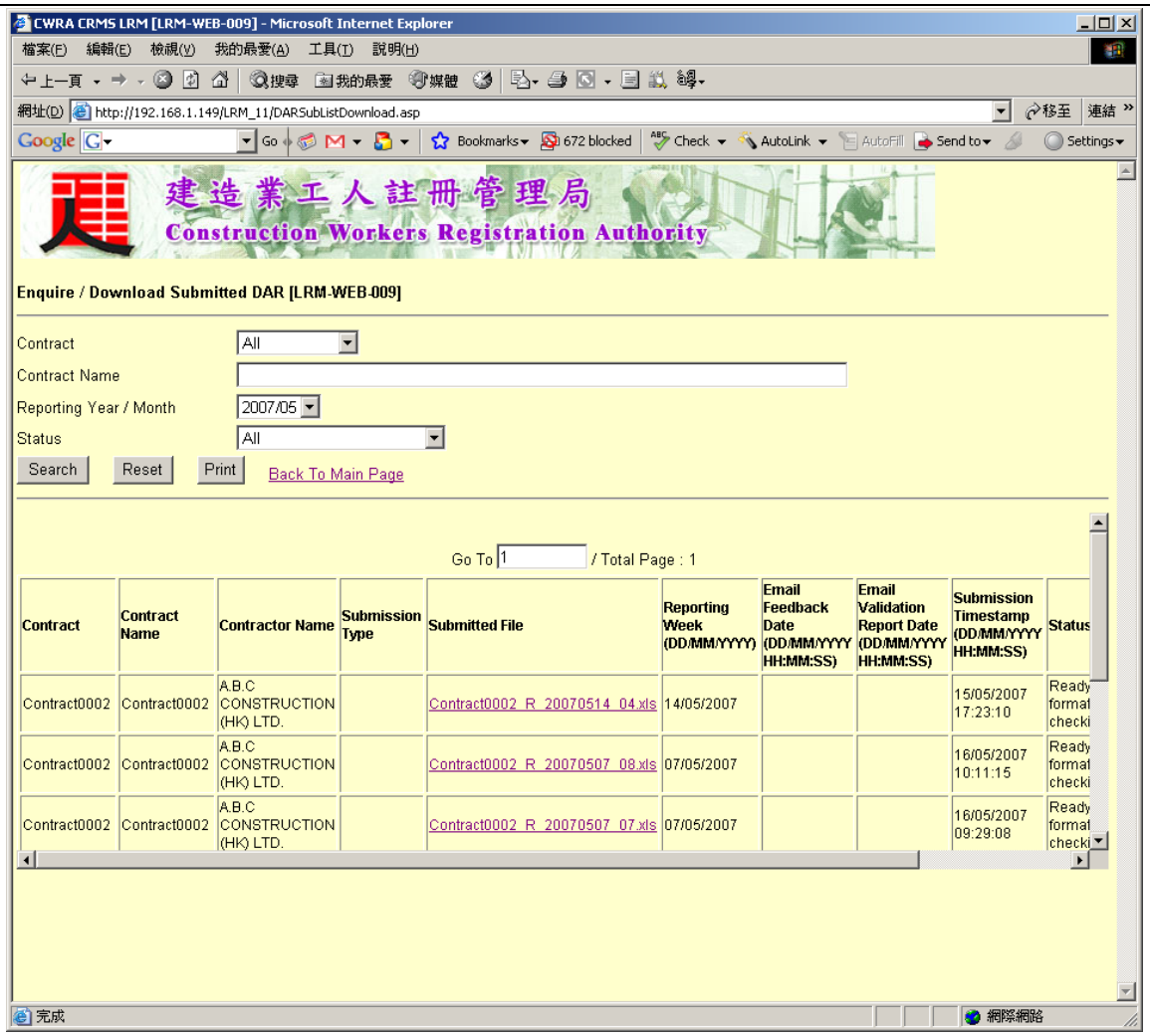
- Click the menu page link: ***Enquire/Download Submitted Data Files [LRM-WEB-008]***



- This function allows user to download their uploaded monthly Labour Returns (GF527, GF527A, Qualified Tradesman Report(QTR)). Therefore, this gives an opportunity to user to re-check on their uploaded files. Note that only those records that had not been archived are available for download.
- Choose the Contract, Contract Name, Submission Type, Reporting Year/Month, Status criteria for the search.
- Click Search button to search based on the chosen criteria. The result will be displayed in the result table below.
- Click the “Submiited File” name link to download the file.
- Click Reset button to reset the searching criteria.
- Click Print button to prepare the result for printing via the web browser.

9.2.13 Enquire / Download Submitted DAR [LRM-WEB-009]

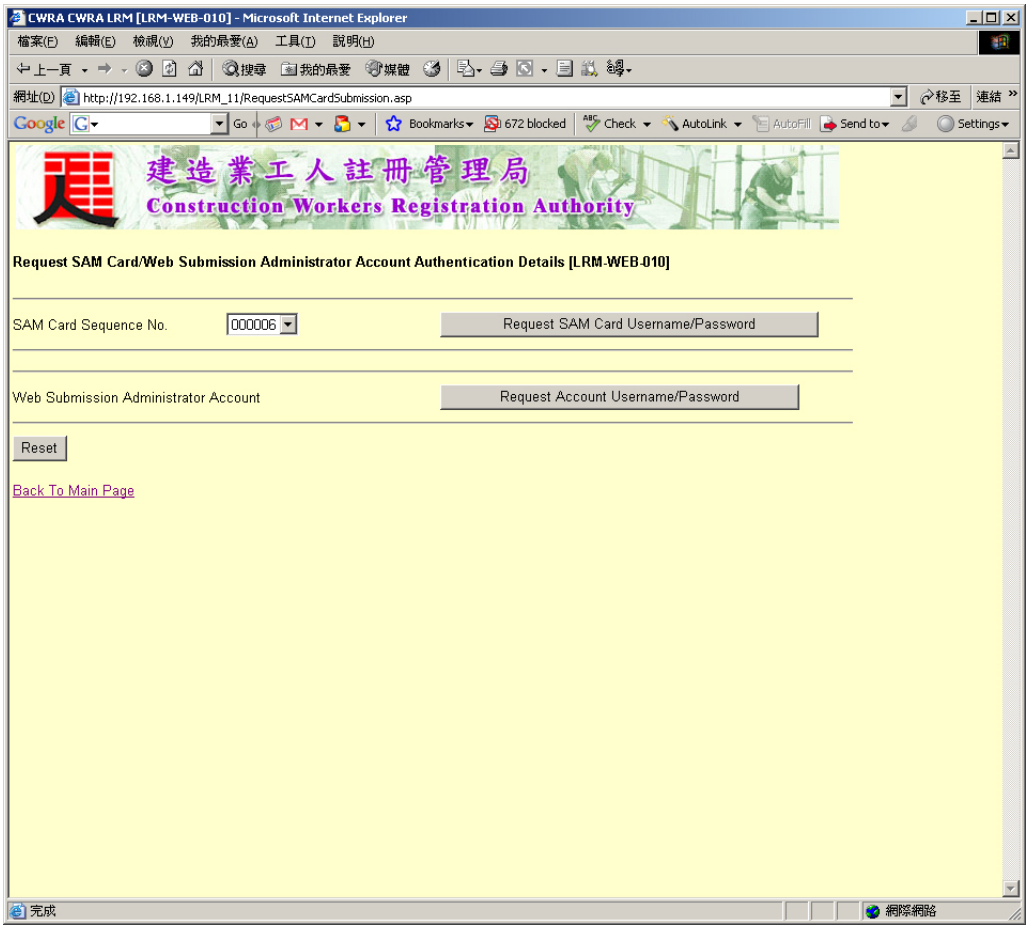
- Click the menu page link: ***Enquire / Download Submitted DAR [LRM-WEB-009]***



- This function allows user to download their uploaded weekly Daily Attendance Report. Therefore, this gives an opportunity to user to re-check on their uploaded files. Note that only those records that had not been archived are available for download.
- Choose the Contract, Contract Name, Reporting Year/Month, Status criteria for the search.
- Click Search button to search based on the chosen criteria. The result will be displayed in the result table below.
- Click the “Submiited File” name link to download the file.
- Click Reset button to reset the searching criteria.
- Click Print button to prepare the result for printing via the web browser.

9.2.14 Request SAM Card/Web Submission Administrator Account Authentication Details [LRM-WEB-010]

- Click the menu page link: ***Request SAM Card/Web Submission Administrator Account Authentication Details [LRM-WEB-010]***



- To request the SAM card authentication details: choose the SAM card seqeuence number from the list box and click the Request SAM Card Username/Password button.
- To request the Web Submission Administrator Account authentication details, click the Request Account Username/Password button.
- After clicking the above buttons, the requested login details will be email to the company's contact person email address next day.
- Click Reset button to reset the selection of the SAM Card Sequence No. selection.
- Click Back to Main Page link to return to main menu page.

10 Appendix F – SATM Interface File Definition

10.1 Overview

Depending on the needs of the Construction Company, SATM may be setup in different options (refer to **section 1.2 SATM Implementation Options**). Therefore, SATM has adopted the use of standard interface text file for interfacing between different components (e.g. interface between the SATM's Worker Registration Module and SATM's Attendance Capture Module or contractor's computer system). This section provides the definitions of the interface file used.

10.2 Interface File of SATM – Worker Registration Module and Attendance Capture Module/Contractor's Computer System

The below tables lists the interface file definition for the interface between SATM's Worker Registration Module and SATM's Attendance Capture Module / Contractor's Computer System.

Description	Source / Destination
Attendance Records	Access Control System of Contractor, Attendance Capturing Module, PDA
Trade Group	CWRA
Trade Code	CWRA
Problematic List	CWRA
Problematic Reason Code	CWRA
Contractor Code Information	CWRA
Department Code	CWRA
Country Code	CWRA
Holiday	CWRA
Authority Code	CWRA
Work Code	CWRA
Portal Path	CWRA
Sub-Contractor Information	Contractor's computer system
Worker Site Registration Records	Access Control System of Contractor, Attendance Capturing Module, PDA
Worker Trade Records	Access Control System of Contractor, Attendance Capturing Module, PDA
Access Control List	Access Control System of Contractor, Attendance Capturing Module, PDA
Customized Message	Attendance Capturing Module, PDA

Attendance Records (File "C:\CRMS\Interface\attend.txt")

Start Pos	End Pos	Length	Description	Data Type	Format
1	14	14	Registration No.	CHAR(14)	
15	22	8	Card Serial No.	CHAR(8)	
23	32	10	Site Code	VARCHAR(10)	
33	40	8	Punch Date	NUMBER(8)	YYYYMMDD
41	46	6	Punch Time	NUMBER(6)	HHMMSS
47	47	1	Punch Type (I – In, O – Out, '-' – Not specified)	CHAR(1)	
48	57	10	Card Reader Code	VARCHAR(10)	Card Reader Code registered in the CRMS.
58	107	50	REMARK	VARCHAR(50)	Reference column for contractor
108	112	5	Trade Code	CHAR(5)	
113	113	1	Is_Card_Trade	CHAR(1)	Is the "practising trade" appears on the Worker registration card? Y – Yes, N –No
114	123	10	Subcontractor Code	VARCHAR(10)	SATM Sub-Con code

Trade Group

Start Pos	End Pos	Length	Description	Data Type	Format
1	4	4	Trade Group No	CHAR(4)	
5	24	20	Trade Group Code	CHAR(30)	
25	124	100	Trade Group Desc (Eng)	VARCHAR(100)	

Trade Code

Start Pos	End Pos	Length	Description	Data Type	Format
1	5	5	Trade Group Code	CHAR(5)	
6	10	5	Trade Code	CHAR(5)	
11	110	100	Trade Group Desc (Eng)	VARCHAR(100)	
111	170	60	Trade Group Desc (Chi)	VARCHAR(60)	
171	173	3	Skill Type (SW – Skilled Worker, SSW – Semi-skilled Worker)	VARCHAR(3)	
174	174	1	Status (Y – Active, N – Inactive)	CHAR(1)	

Problematic List

Start Pos	End Pos	Length	Description	Data Type	Format
1	14	14	Registration No.	CHAR(14)	
15	22	8	Card Serial No.	CHAR(8)	
23	32	10	Reason Code	CHAR(10)	

Problematic Reason Code

Start Pos	End Pos	Length	Description	Data Type	Format
1	10	10	Reason Code	CHAR(10)	
11	110	100	Code Desc. (Eng)	CHAR(100)	
111	170	60	Code Desc. (Chi)	CHAR(60)	

Contractor Code Information

Start Pos	End Pos	Length	Description	Data Type	Format
1	5	5	Contractor Identity Code	CHAR(5)	
6	105	100	English Name	CHAR(100)	
106	165	60	Chinese Name	CHAR(60)	
166	166	1	Status	CHAR(1)	

Department Code

Start Pos	End Pos	Length	Description	Data Type	Format
1	3	3	Department Code	CHAR(3)	
4	53	50	Department English Name	CHAR(50)	
54	54	1	Status	CHAR(1)	

Country Code

Start Pos	End Pos	Length	Description	Data Type	Format
1	3	3	Country Code	CHAR(3)	
4	53	50	Country English Name	CHAR(50)	
54	73	20	Country Chinese Name	CHAR(20)	
73	73	1	Active Flag	CHAR(1)	

Holiday

Start Pos	End Pos	Length	Description	Data Type	Format
1	5	5	Holiday No	CHAR(3)	
6	13	8	Holiday Date	CHAR(8)	
14	113	100	Holiday Description	CHAR(100)	

Authority Code

Start Pos	End Pos	Length	Description	Data Type	Format
1	3	3	Authority Code	CHAR(3)	
4	103	100	Authority English Name	CHAR(100)	
104	123	20	Authority Chinese Name	CHAR(20)	

Work Code

Start Pos	End Pos	Length	Description	Data Type	Format
1	3	3	Work Code	CHAR(3)	
4	53	50	Work Category	CHAR(50)	
54	203	150	Work Sub-category	CHAR(150)	

Portal Path

Start Pos	End Pos	Length	Description	Data Type	Format
1	100	100	URL Address	CHAR(100)	

Sub Contractor Information

Start Pos	End Pos	Length	Description	Data Type	Format
1	10	10	Sub Contractor Code	CHAR(10)	
11	50	40	English Name	CHAR(40)	
51	70	20	Chinese Name	CHAR(20)	
71	170	100	Address	CHAR(100)	
171	270	100	Address (line 2)	CHAR(100)	
271	370	100	Address (line 3)	CHAR(100)	
371	470	100	Contact Person	CHAR(100)	
471	510	40	Contact Phone No.	CHAR(40)	
511	710	200	Remark	CHAR(200)	

Export Section

Worker Site Registration records (File "C:\CRMS\Interface\worker_details.txt")

Start Pos	End Pos	Length	Description	Data Type	Format	Field padded with space *
1	14	14	Registration No.	CHAR(14)		
15	22	8	Card Serial Number	CHAR(8)		
23	30	8	Issue Date	CHAR(8)	YYYYMMDD (This is an obsolete field therefore, it is filled with empty space)	
31	38	8	Registration Expiry Date	CHAR(8)	YYYYMMDD	
39	58	20	Green Card No.	VARCHAR(20)		
59	66	8	Green Card Expiry Date	CHAR(8)	YYYYMMDD	
67	69	3	Green Card Issuing Authority	VARCHAR(3)	Referring to the Card Issue Authority Code file	
70	71	2	Green Card Issuing Department	VARCHAR(2)	Referring to the Card Issuing Authority Department Code	
72	76	5	Principal Trade	CHAR(5)	Referring to the Trade Code file	
77	96	20	Categories	VARCHAR(20)		
97	97	1	Type of Registration	CHAR(1)	P – Provisional N – Normal	
98	117	20	HKID / Passport No.	CHAR(20)		
118	118	1	ID Type	CHAR(1)		
119	121	3	Working Visa Country Code	CHAR(3)	Country Code	
122	129	8	Visa Valid thru	CHAR(8)	YYYYMMDD	
130	177	48	English Name	CHAR(48)		
178	193	16	Chinese Name	CHAR(16)	Store max 8 Chinese characters according to the Worker Card. The file uses ANSI encoding which means 2 bytes for every Chinese.	
194	201	8	Date Of Birth	CHAR(8)	YYYYMMDD	
202	202	1	Sex (M – Male, F – Female)	CHAR(1)		
203	217	15	Contact Phone Number	CHAR(15)		X
218	232	15	Home Phone Number	CHAR(15)		X
233	332	100	Address Line 1	CHAR(100)		X
333	432	100	Address Line 2	CHAR(100)		X
433	532	100	Address Line 3	CHAR(100)		X
533	534	2	District (HK, KL, NT)	CHAR(2)		X
535	539	5	Practising Trade	CHAR(5)	Referring to the Trade Code file	X
540	549	10	Sub Contractor Code	VARCHAR(10)		X

550	649	100	Sub Contractor Name	VARCHAR(100)		X
650	749	100	Employer Name	VARCHAR(100)		X
750	757	8	Expiry of Access	CHAR(8)	YYYYMMDD	X
758	763	6	Customized Column for Contractor i.e. 0 for Off, 1 of On	CHAR(6)	e.g. 000000, 001100, 111111	X
764	963	200	Remarks	VARCHAR(200)		

** The field marked with "X" is not applicable to SATM-Lite therefore, it will be padded with space.*

Worker Trade records (File "C:\CRMS\Interface\worker_trades.txt")

Start Pos	End Pos	Length	Description	Data Type	Format	Field padded with space *
1	14	14	Registration No.	CHAR(14)		
15	19	5	Trade Code	CHAR(5)		
20	27	8	Issue Date	CHAR(8)	YYYYMMDD	
28	35	8	Expiry Date	CHAR(8)	YYYYMMDD	
36	36	1	Registration Type of Trade	CHAR(1)	'P' or 'N'	
37	86	50	Remark	VARCHAR(50)		X

** The field marked with "X" is not applicable to SATM-Lite therefore, it will be padded with space.*

Access Control List (File "C:\CRMS\Interface\access_control.txt")

Start Pos	End Pos	Length	Description	Data Type	Format
1	14	14	Registration No.	CHAR(14)	
15	22	8	Card Serial No.	CHAR(8)	
23	42	20	HKID / Passport No.	CHAR(20)	
43	43	1	ID Type (1 – HKID, 2 – Passport)	CHAR(1)	
44	51	8	Registration Card Expiry Date	YYYYMMDD	
52	61	10	Practising Site	VARCHAR(10)	
62	66	5	Practising Trade	VARCHAR(5)	
67	74	8	Practising Trade Expiry Date	YYYYMMDD	
75	94	20	Green Card No.	VARCHAR(20)	
95	102	8	Green Card Expiry Date	YYYYMMDD	
103	103	1	Is_Card_Trade	CHAR(1)	Is the "practising trade" appears on the Worker registration card? Y – Yes, N –No

Customise Messages (File "C:\CRMS\Interface\message.txt")

Start Pos	End Pos	Length	Description	Data Type	Format
1	80	80	Customise Message	CHAR(80)	

Note: Six records in this file to represent the pre-defined six customise messages.

10.3 Interface File for Archived Attendance Records

SATM provides the function to archive the attendance records recorded by the system. The archived attendance records file is in a text file format. Below table shows the definition of the archived file.

Attendance Records Archived

Start Pos	End Pos	Length	Description	Data Type	Format
1	14	14	Registration No.	CHAR(14)	
15	22	8	Card Serial No.	CHAR(8)	
23	32	10	Site Code	VARCHAR(10)	
33	40	8	Punch Date	NUMBER(8)	YYYYMMDD
41	46	6	Punch Time	NUMBER(6)	HHMMSS
47	47	1	Punch Type (I – In, O – Out, '-' – Not specified)	CHAR(1)	
48	57	10	Card Reader Code	VARCHAR(10)	Card Reader Code registered in the CRMS.
58	107	50	REMARK	VARCHAR(50)	Reference column for contractor
108	112	5	Trade Code	CHAR(5)	
113	113	1	Is_Card_Trade	CHAR(1)	Is the "practising trade" appears on the Worker registration card? Y – Yes, N -No
114	123	10	Subcontractor Code	VARCHAR(10)	
124	124	1	Type of Records	VARCHAR(1)	'R' – Raw 'M' – Manual

10.4 Interface Files for SATM setup with Registration Mode and Reporting Mode

SATM can be setup in a distributed scenario (see Appendix C – SATM Operation Mode for details). Interfaces definition files are different between this scenario and the normal scenario. This section describes the interface files for the distributed setup scenario.

Description	Description
Contract	Contract Information (from registration module to reporting module)
Contract Requirement	Contractual Requirement for QTR (for registration module to reporting module)
Site	Contract Information (from registration module to reporting module)
Practising Site	Worker Information (from registration

	module to reporting module)
Nominated Subcontractor	Contract Information (from registration module to reporting module)
Worker Name List	Name list of deleted workers (from registration module to reporting module)

Contract

Start Pos	End Pos	Length	Description	Data Type	Format
1	20	20	Contract No	VARCHAR(20)	
21	170	150	Contract Title	VARCHAR(150)	
171	370	200	Contract Description	VARCHAR(200)	
371	570	200	Contract Site Address	VARCHAR(200)	
571	670	100	Contract Site Representative	VARCHAR(100)	
671	690	20	Contract Site Representative Contact	VARCHAR(20)	
691	695	5	Government Department Code (Client)	VARCHAR(5)	
696	735	40	Other Client	VARCHAR(40)	
736	755	20	Government Division	VARCHAR(20)	
756	775	20	Government Department Contact	VARCHAR(20)	
776	780	5	Main Contractor Code	VARCHAR(5)	
781	783	3	Work Code	VARCHAR(3)	
784	983	200	Broad Stage of Work	VARCHAR(200)	
984	1003	20	Percentage Completed	VARCHAR(20)	
1004	1011	8	Commencement Date	DATETIME	YYYYMMDD
1012	1020	9	CWRA Contract Number	VARCHAR(9)	
1021	1028	8	Practical Completion Date	DATETIME	YYYYMMDD
1029	1036	8	Defect Liability	DATETIME	YYYYMMDD

Contractual Requirement

Start Pos	End Pos	Length	Description	Data Type	Format
1	20	20	Contract Number	VARCHAR(20)	
21	25	5	Trade Group Number	CHAR(5)	
26	28	3	Percentage for Skilled Workers	INTEGER	999
29	31	3	Percentage for Semi-skilled and Skilled Workers	INTEGER	999

Site

Start Pos	End Pos	Length	Description	Data Type	Format
1	5	5	Site Code	VARCHAR(5)	
6	25	20	Site Contract No	VARCHAR(20)	
26	125	100	Site Eng Description	VARCHAR(100)	
126	165	40	Site Chinese Description	VARCHAR(40)	
166	265	100	Site Address (1)	VARCHAR(100)	
266	365	100	Site Address (2)	VARCHAR(100)	
366	465	100	Site Address (3)	VARCHAR(100)	
466	505	40	Site Representative	VARCHAR(40)	
506	525	20	Site Representative Contact	VARCHAR(20)	

526	540	15	Site Contact	VARCHAR(15)	
541	541	1	Site Status	CHAR(1)	

Practising Site

Start Pos	End Pos	Length	Description	Data Type	Format
1	14	14	Registration Number	VARCHAR(14)	
15	19	5	Site Code	VARCHAR(5)	

Nominated Subcontractor

Start Pos	End Pos	Length	Description	Data Type	Format
1	20	20	Contract Number	CHAR(20)	
21	30	10	Subcontractor Code	CHAR(10)	
31	31	1	Active Flag	VARCHAR(1)	Y – Yes N – No

Worker Name List

Start Pos	End Pos	Length	Description	Data Type	Format
1	14	14	Worker Registration No	CHAR(14)	
15	62	48	Worker Name	VARCHAR(48)	

11 Appendix G – SATM Exported Daily Attendance Report and Labour Returns Naming Convention & Default Path

11.1 Naming Convention & Default Path

This section describes the naming convention and the default path for SATM exported file for the Daily Attendance Report and other Labour Returns (GF527, GF527A, and Qualified Tradesman Report). Below are the convention used for each type of reports:

Daily Attendance Report

Format: A_B_YYYY_MM_DD_99
Example: 6WSD05_2006_08_26_01.xls

Label Description
A Contract No or BD reference no
B Type of File
R – Raw data file
C – Consolidated data file
YYYY_MM_DD Start date of reporting week
99 Version no. e.g. 01

GF527 and GF527A

Format: A_B_C_YYYY_MM_99
Example: 6WSD05_MC_GF527_2006_07_01.xls

Label Description
A Contract No or BD reference no
B Main contractor (MC) or Nominated sub-contractor (NSC)
C GF527 or GF527A
YYYY Year
MM Month
99 Version no. e.g. 01

Qualified Tradesman Report (QTR)

QTR 1 - 4

Format: A_B_C_YYYY_MM_99
Example: 6WSD05_B_SW_2006_07_01.xls

Label Description
A Contract No or BD reference no
B B – Building and Civil Engineering Trades
E – E&M trades

C SW – Skilled Worker
SSW – Semi-Skilled Worker
YYYY Year
MM Month
99 Version no. e.g. 01

QTR 5

Format: A_SUM _YYYY_MM_99
Example: 6WSD05_SUM_2006_07_01.xls

Label Description
A Contract No or BD reference no
SUM QTR summary
YYYY Year
MM Month
99 Version no. e.g. 01

<u>Default Exported File Path</u>

C:\CRMS\Export

~ END ~