

## ■ Install / Uninstall

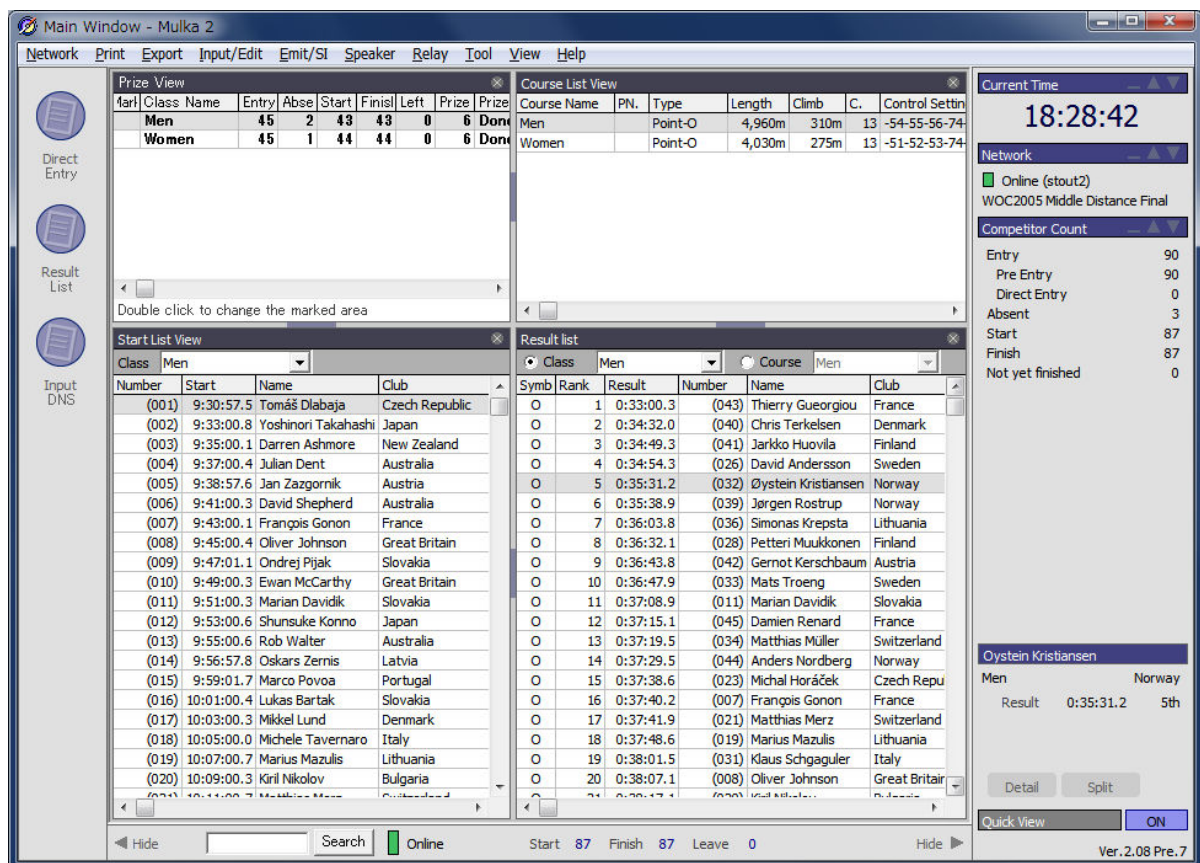
- Install
  - Execute Mulka2en.msi, then follow the instructions.
- Uninstall
  - 2 ways are available.
  - One is that, open the control panel, select program, then uninstall Mulka2.
  - Another is that, execute Mulka2en.msi again. The dialog which ask uninstall or repair is shown, then select Uninstall.
- Version up
  - You must uninstall old version at first.
  - Execute Mulka2en.msi (both of the new version and the old version are available ), then the dialog which ask uninstall or repair is shown, select uninstall.
  - After the uninstall process finished, execute Mulka2en.msi (new version) again.

## ■ Basic operation

- Starting Mulka 2
  - A short cut is created on the desk top and start menu when Mulka 2 is successfully installed.
  - Click the short cut, then start menu of Mulka 2 appears.



- Network manager : Network manager is used when Mulka 2 is used by multiple computers via a network.
  - Main window : Main window is used for starting regular operation windows.
  - Event manager : Event manager is used for creating event data (original setting for each event).
  - Others : This function is used for starting a tools for Score Orienteering data processing and a tool for outputting the data to a big TV screen.
- Main Window
    - Double-click "Competitor" on Main window, then "Competitor information window", which shows detailed information about each competitor, appears.
    - Right-clicking "View" enables to amend contents of the view.
    - The windows can be separated or merged freely.
    - A name, club name, EMIT card number, "P1" (= miss punch at one control) as well as start number are usable to search a competitor on "Search box".



- Saving data
  - All data are automatically saved in real-time. Do not worry about missing the data!
  - The processed data are saved in a file named "changes.dat" in the data folder.
  - The "changes.dat" file records all change tracking as text format. It may be possible to edit the raw data directly.

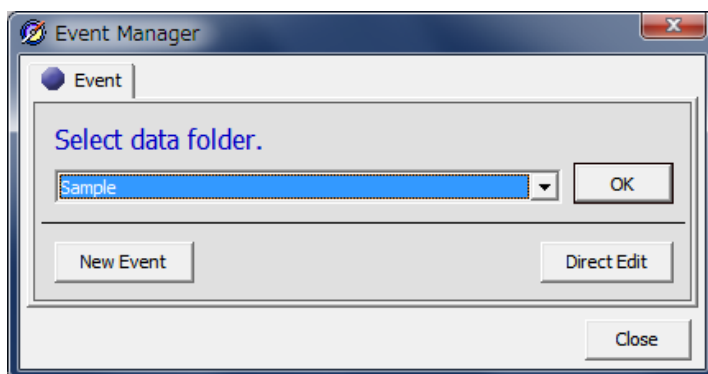
- Firewall (Security Alert)
  - Normally, multiple computers are used to operate Mulka 2 at an Orienteering event. Therefore, Communication manager and Main window are originally set to accept connections from other computers. Sometimes a warning message regarding firewall protection may appear when starting Mulka 2. Except that you have sufficient knowledge of firewall, please select "unblock" .



## ■ Create Event Data

- Outline
  - When you use Mulka 2, you need to create an "Event Data" (folder and files) that correspond to each event or training session. General procedures of creating the Event Data are as follows:
    - Create a "Start List" file
    - Create a "Event Data" with using "Event Manager"
    - Load the start list file into the Event Data folder
    - Set class and course details
  - The Event Data should be ready before you start all event preparation. Particularly, if you use the EMIT timing system, it is important to carry out trials of EMIT cards with the actual Event Data file.
  - In a multi-day event, one Event Data needs to be created for each day of event.
- Create a Start List file
  - The Start List file is created as CSV or Tab separated text format, which can be prepared by Microsoft Excel etc. If you have certain kinds of start list files, you can convert these existing files for the use of Mulka 2.
  - Here are necessary fields in general. Please note that the field names should be described in the first line of the file, then followed by contents from the second line. See the chapter "Data file specification" for more details.

- [Necessary fields]
  - CLASS NAME
    - Enter the class name of each competitor in this field.
  - STNO
    - Each competitor is given a unique code. Normally the code is a three to five digit number (the number should not be too long). If you use number cards in the event, use these allocated numbers.
  - NAME
    - Enter the name of each competitor in this field.
  - CLUB
    - Enter the club name of each competitor in this field.
  - START TIME
    - Enter the start time of each competitor in this field. If you do not define any start time in advance (i.e. competitors can start anytime they like using the lift-up starting), leave the field blank.
  - CARD NUMBER
    - Enter the EMIT-card number / SI-card number in this field.
- Once all necessary fields are filled, save the file as "Startlist.csv" (CSV) or "Startlist.txt" (Tab separated text). This file will be automatically converted to "Startlist.dat" when it is loaded in Mulka 2 programme.
- If you accept direct entries on the day of the event, some places for them should be kept in advance. You can register the direct entries with tentative names and give start numbers to each. It is recommended to decide their start number and class, start time, and card numbers and enter the fixed details into this Start List file in advance, so that you can reduce the workload on the event day.
- Create an Event Data with using Event Manager
  - When the Start List file is ready, the next step is to prepare an Event Data. Select Event Manager at the Start Menu, and you will see the following window. To create a new Event data file, click "New Event".



- Enter "Event Name", "Date of Event", and other related information and click "OK" .

**New Event**

Event Name

Filename used by output

Date  **Calendar** Terrain

Homepage Url

Data Folder

☒ Standard Folder C:\Users\Yosuke Matoba\Documents\Mulka2\Data\\*

☐ Other  ...

Folder Name

☒ Standard Name

☐ Other

☐ Detail

OK Cancel

Input an event name within 10-digit alphanumeric characters.

- Load the start list file into the Event Data file
  - When you click "OK", a window for editing "Event" appears. Drag the prepared Start List file and drop at "Drop files here to copy to a folder."

**Event Edit**

Class/Course Assign Card

Course Data

Double click each line to edit

Create Delete Sort

Course No	Short N	File Name	PN	Type	Length	Climb	C.	Control Setting

Set courses by class names

Class Data

Double click each line to edit

Create Delete Sort

Class Name	File Name	Course	Qualify Cou	Prize Count	Limit Time	Limit Percent	Finish area d	Winning Time

Whole setting

Pattern Number

Length

Control

Whole setting

Limit Time

Qualify Count

Prize Count

Winning Time

Event Data Direct Edit

Drop files here to copy to a folder.

Close

- When the file is dropped, classes registered in the Start List file are detected and shown on the window. As well as that, you can add other classes manually by clicking "Create" button, if not all classes appear there.
  - As the classes are sorted in the order of appearing in the Start List file. If you want to change the order of the class list, use "Sort" button.
- Set course details
    - When the Event Data file is created, input course data next. There are several ways to prepare the course data:
      - Input course data manually by Event Manager
      - Create "Course.dat" file with Excel , then copy to event data folder
      - Output course data by OCAD and import the data in Mulka 2.
    - If you use OCAD file import function, export course file (Version 8 Text Format) as "CoursesV8.txt" in OCAD, then drop this to "Drop files here to copy to a folder." on Event Manager.
  - Here is an example of preparing the course data by Event Manager. If you want to create Course.dat file directly, see the data format of this procedure.
  - Firstly, click "New" button on the course list and input a course name. Repeat this process to name all courses. If you set one class per a course, for example you prepare for a training session, click "Set courses by class names" button at the centre of the window. A course named after the class is created, then.
  - After the course names are entered, set control details. Click "Control" button at the right of the course list, then a course setting windows appears. Click each course to input unit/station code of each control. If you use the punching finishing with SPORTident, select "YES" at the punching finish column and enter "F" at the code input column.

Control Setting

Select the course for control settings

Insert / when several controls having different codes are used at the same time and same place.

Course Na	PN	C.	Control Setting
M21E		0	0-
W21E		0	0-

☒ Modify the courses having the same pattern number.

Setting by card:
 ☐ EMIT Reading Unit
 ☐ EMIT MTR2/3/4
 ☒ SPORTident BSM7

COM14  Offline

Lift Up Start: ☒ Yes ☐ No

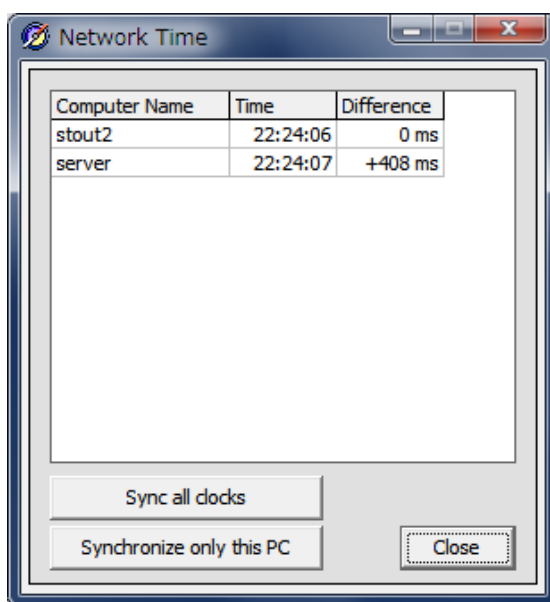
1		25	
2		26	
3		27	
4		28	
5		29	
6		30	
7		31	
8		32	
9		33	
10		34	
11		35	
12		36	
13		37	
14		38	
15		39	
16		40	
17		41	
18		42	
19		43	
20		44	
21		45	
22		46	
23		47	
24		48	

Punching Finish: ☐ Yes ☒ No

- If you already have an "Answer Card" for each course, which card records the data of correct unit/station codes in the correct order, these cards can be used for Control setting. In this case, connect a reading device (such as a reading unit) to a PC then click "Connect" button at the bottom left of the window. When the device is successfully connected, the following window appears. Confirm the contents then click "OK"
  - After you set all control information, click "Length" button on the right of the Course List. However, this process is not mandatory. You can leave them blank if you do not use this function.
  - Finally, check again if there is any error included in the courses, such as a typo, an error about the lift-up starting and /or punching finishing settings with course details and the answer cards. When you confirm that all the information entered in the file are correct, click "OK" button.
- Set class details
    - When all class settings have been made, enter the details that which class is correspond to what course. To input the details, double-click each line shown on the Class List. As well as that, information regarding time restriction, the number of qualifiers, the number of prizes, and winning times of each class are also entered in this step, if necessary.
    - "Limit Time" button
      - This field is used when the time restrictions, such as the maximum running time, stipulated time (%), and the Finish closing time are set.
    - "Qualify Count" button
      - Set the number of qualifiers
      - This field is used when the number of qualifiers is fixed for a heat or selection race.
    - "Prize Count" button
      - Set the number of prizes
      - This field is used when the number of prizes is fixed. As the number entered here is required to print a list of prizewinners, please remember the number.
    - "Winning Time" button
      - Set winning times
      - Enter the winning times of each class
      - This field is used by live result function.
  - Save the Event Data
    - When all necessary settings have been done, click "Close" button to save the settings. If you want to edit the Event Data file directly by using a text editor etc, click "Direct Edit" button. After you are asked if you would like to save the current settings, an Event Data folder where the settings file is located.

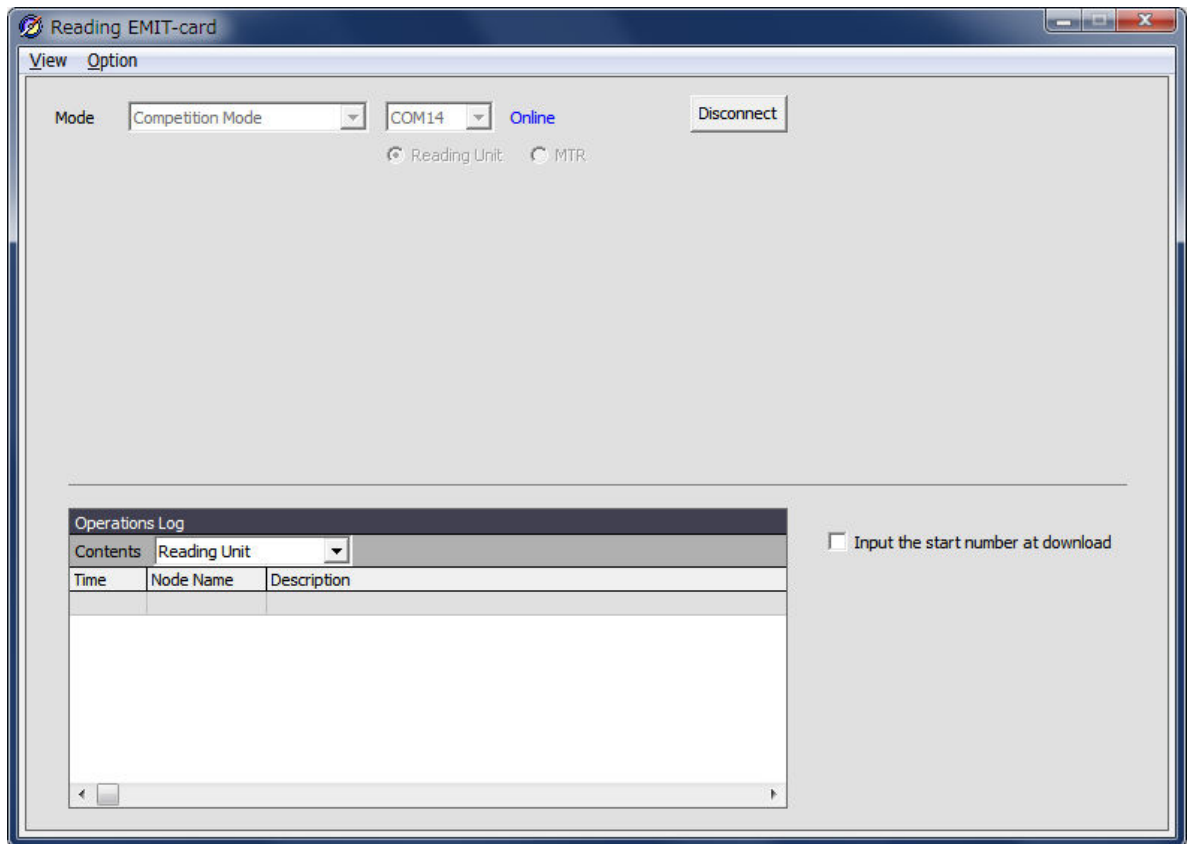
## ■ Managing individual race event

- On the day of an Event
  - Setting necessary devices and synchronise all clocks
  - Reading out the data
  - Printing provisional results
  - Managing competitors who have not yet finished.
- The number of PCs used for the operation
  - If all cards can be corrected to be read at another place, only one PC is required for the operation.
  - If you read the card data face-to-face with competitors, it is recommended to use more than two PCs, particularly the number of competitors is more than 100.
  - When two PCs are available, one PC is used for reading the data and the other one is used for printing and data processing.
  - In a big event, several PCs can be used for reading the data.
- Setting necessary devices and synchronise all clocks
  - For a big event, using five to six PCs or providing commentary and stage management information, preparation should be started at least 2.5 hours before the first competitor starts.
  - For synchronising clocks, firstly set the correct system time of one PC, then synchronise other PCs with the standard PC.
  - Network time function of the Main Window can show a list of the system time of all PCs connected to the network [Tool]-[Network Time And Sync]
  - If the OS of the PCs are Windows XP, the system time can be synchronised all one time. However, PCs with Windows Vista or Windows 7 have to set each system time manually.





- Reading the card data
  - Start a reading function window by selecting [EMIT/SI]-[Reading EMIT-card] from the menu bar of the Main Window
  - Select "Competition Card Mode", then click "Connect" button.



- The card data can be read by a reading unit or MTR. Generally, a reading unit is more recommendable.
- If a card that is not registered on the Start List file, an alert dialogue appears to ask to enter the user's start number (otherwise, you can search the user by his/her names.)
- If the start procedure is the lift-up starting, the time when the card was activated is automatically calculated from the time of reading the card and system time of the PC. An alert message appears if the gap between the time of activation and actual starting time.
- With this alert's help, the organisers can immediately ask the competitor if he/she was late for the start, not by confirming to the start area.
- When the read-out data indicate disqualified results, a report is automatically printed to explain why the competitor is disqualified.
- As well as that, an image of the correct back-up patterns is printed to compare to the back-up label of the disqualified competitor.
- These settings can be changed at [Tool]-[Auto print of miss punch report] of the menu bar.
- For printing manually, open "Competitor Information Window" of the competitor and click "Print" button.

- EMIT card reading points
  - It is an important factor that where the EMIT cards are read, particularly the finish area and event arena are located in different areas.
  - Normally, we read the EMIT card data at the finish area, and then transmit the raw data to the event arena. This method is advantageous to deal with errors and troubles caused by EMIT cards.
  - However, for some reasons such as no electric supply at the finish area or short on staff members, the EMIT card data may be read at the event arena.
  - Sometimes all EMIT cards are once collected at the finish area to read at the event arena, then return to the runners there. Although, this procedure is complicated and troublesome.
  - One possible problem of not collecting EMIT card at the finish area is that not all runners come to the reading point at the event arena.
  - Thoughtful layout design would avoid such a problem, but not always so effective.
  - To recognise at least which competitors have finished, we sometimes set an on-line control unit at the finish area and ask them to punch at the unit. The information is transmitted from the on-line unit to the event arena.
  - Even you read the data at the event arena, it is essential to have a back-up timing system at the finish area.
  
- Data processing of competitors getting a late start
  - If the start procedure is the lifting –up and the finish procedure is the punching finish, the competitor's card records the net time of the race. If the competitor was late for the start, the time difference should be add on manually.
  - Basically, the late start time of the competitor is recorded at the start area, then the person at the start area need to inform the time to the person who deals with data processing.
  - However, as explained before, the late start can be dealt without asking to the start area if the function of alerting the time of activation is used
  
- Providing a personal split time report
  - A personal split time report can be automatically printed at the time of reading the card data.
  - This setting is changeable at [Tool] Menu-[Auto print of personal report]
  - POS thermal printer can be used.
  - If you want to print the report manually, open "Competitor Information Window" of the competitor and click "Print" button, the same procedure as DISQ Information report.
  - On-demand printing function is also available. Use [Print] Menu-[Competitor Print].
  
- Printing results list
  - As shown the above, various types of reports can be printed from [Print] Menu.
  - Results list are also printable using a short cut key (CTRL+P) .

- Managing competitors who have not yet finished.
  - When you confirm that all competitors have started, ask the staff at the start area if there is any competitor who did not start to input the information.
  - The information of now-show runners is input at [Input/Edit] menu -[DNS Input].
  - As the DNS information is entered by their start number, the start list provided to the staff at the start area should have the start number.
  - If the start number is unknown but you have their start times and names, show the start list or a list of competitors who have not yet finished, double-click the competitor to show "Competitor Information Window" then click "Absent" button.
  - If you input an existing competitor as DNS by error, show "Competitor Information Window" of the competitor and manually change the record from DNS to blank
  - The list of competitors who have not yet finished can be shown on the window, as well as being printed.

**Shigeyuki KOIZUMI - Competitor Info**

1006	Shigeyuki KOIZUMI	Tokiwa Sorinkai	JPN
Card No	<401887>	Start	10:20:00 ▶ Finish ▶ Result
Class	ME	Course	ME
Rank		Rank	
Status	Not yet finished		

Overall	Personal Information	Record Detail	Splits Data	Other
Name	Shigeyuki KOIZUMI	Club	Tokiwa Sorinkai	Change Name
Class	ME	Course	ME	Change Class
Start	10:20:00			Change Start
Result				Change Result
Card No	401887	Card Memo		Change Card
				Absent

Operations Log   Card Data Detail   Export   Print   Close

- Manual settings of the results
  - "Competitor Information Window" is used for setting the records manually.
  - Click "Change Result" button to input the results
  - The results can be entered as both the finish time and exact running time.
  - If the result is disqualified, enter "DISQ" at an appropriate field.
  - The data input manually is prioritized over the read-out data of the card.

- Changing names, clubs, start times and card numbers
  - For changing the above details, show "Competitor Information Window" i and modify the data, as the same procedures as manual settings of the results.
  - If the start time is changed and the finish time of the result has been manually input, the running time will be re-calculated.
  - If the e-card number is changed after the stored data were all read-out, the running time will not be re-calculated. Therefore, the e-card should be read again.
  - Otherwise, click [Card Data Detail] button of "Competitor Information Window" i to show [Extra operation] function. With this function, the data will be internally re-calculated.
  
- Back-up time keeping system
  - As E-cards have a risk of failure, a manual back-up timing system should be prepared the finish area.
  - Popular manual timing systems are System Stopwatch (a stop watch with a printer) or Mulka 2 function ([Tool] menu-[Manual Finish Time Recorder]).
  - If an E-card is broken and cannot read-out the data, compare the contents of the back-up timing system and the list that can be shown at [View] menu-[Finish List] to identify the finish time of the competitor.
  - In addition, click [Card Data Detail] button in "Competitor Information Window" i of the competitor, then "Show correct label pattern" to show a image of the correct back-up label pattern. Compare the two images to confirm if the competitor visited all controls in the correct order.
  
- Operations in a network
  - You can operate Mulka 2 more efficiently in a network comprising multiple PCs.
  - Mulka 2 is operated as "Server Mode" in one computer, whereas other PCs use "Client Mode".
  - Please be sure to create an Event Data and save related files only on the PC working as a server.
  - Start "Net Manager" on the PC working as a server then load the data at "Server Mode"
  - When the data are loaded, click "Main Window" button on the window of Net Manager to start the Main Window.
  - Net Manager can be used at the other PCs. However, instead of selecting the data to be loaded, click "Client Mode". tab, enter the IP address of the server PC, then click "Connect" button.
  - When the client PCs successfully connect to the server PC, the data on the server PC are transferred to the client PCs and an "Online" sign appears.
  - After "Online" status is confirmed, click "Main Window" button on Net Manager to start the Main Window, as you did on the server PC.
  - All PCS on the network can equally deal with all data and functions.
  - It is also possible to input DNS competitor data and read card data by multiple PCs.
  - However, it is not recommended to use the server PC for tasks which require much resource such as printing.

## ■ Managing relay event

- Data processing procedures for relay events
  - Set places based on "Relay Team" results for each "Relay Class".
  - The Relay Team results are calculated as the total time of the team members.
  - The start time is allocated for the first runner only. The start time of the second runner is automatically set depending on the time the first runner finished.
  - Other functions and operations are same as the individual events.
  - For some reasons, if the third runner finishes before the second runner, the results will have to calculate manually.
- Required data
  - "RelayClass.dat" file, to define the Relay Class.
  - "RelayTeam.dat" file, to define the Relay Team and members.
  - In addition to the above, a full set of files which are used in individual events (such as "Startlist.dat", "Class.dat", "Course.dat" etc.)
  - In "RelayClass.dat" file, describe the start time, number of competitors, re-start time for each Relay Class.
  - In "RelayTeam.dat" file, describe the team name, class of the team, and bib numbers of each running order.
  - In "Startlist.dat" file, describe the name of competitor, card number, and course name.
  - See the sample data for more information.
- Print and show the entry lists and preliminary results
  - Please note that the results of Relay events are shown on the "Relay Result List" of the Main Window, not on the "Result List".
  - The "Result List" shows individual results of each running order.
  - These results are printable by [Print] menu, as the same procedure as individual events.
  - The entry lists can be printed from [Start List], and the preliminary results from [Result List].
  - Select a format for Relay event to print them.

Main Window - Mulka 2

Network Print Export Input/Edit Emit/SI Speaker Relay Tool View Help

Direct Entry

Result List

Input DNS

Relay team list

Class ME

Number	Team name	Memo	1st	2nd	3rd
[01]	China		Xue Kezhan	He Hao	Li Xiang
[02]	Japan		KOIZUMI Shige	MATSUZAWA T	YAMAGUCHI Da
[03]	Japan		KOBAYASHI Ry	KATO Hiroyuki	YAGISHITA Dai
[04]	Hong Kong		YIP CHAK LUN C	CHEUNG CHI K	CHIU HO CHING
[05]	Hong Kong		MAN CHI KIN	TANG CHUN KI	LAM SAM CHOI
[06]	Kazakhstan		Vlassov Denis	Artyukhin Timur	Zenin Alexand
[07]	Kazakhstan		DANIYAR TURIN	AZAMAT YEKIZH	
[08]	Korea		MOON JOUNG H	HWANG MYUNG	HA TAE HYUN
[09]	Chinese Taipei		Hsiao Kai Yuan	Chen Cheng Hs	Chang Che-Ha

Relay result list

Class ME

☐ Course ☐ Intermediate Rank

Rank	Number	Team name	1st	2nd	3rd
1	[02]	Japan	KOIZUMI S	MATSUZA	
		2:23:30	0:49:29	1 0:48:28	1
			0:49:29	1 1:37:57	1
2	[03]	Japan	KOBAYASHI	KATO Hiro	
		2:33:41	0:52:18	2 0:48:50	2
			0:52:18	2 1:41:08	2
3	[01]	China	Xue Kezha	He Hao	
		2:50:29	0:54:17	3 1:04:10	4
			0:54:17	3 1:58:27	4
4	[06]	Kazakhstan	Vlassov De	Artyukhin	
		2:59:26	0:55:49	4 1:02:33	3
			0:55:49	4 1:58:22	3
5	[04]	Hong Kong	YIP CHAK	CHEUNG C	
		3:15:42	0:58:02	5 1:14:47	6
			0:58:02	5 2:12:49	5
6	[05]	Hong Kong	MAN CHI H	TANG CHL	
		3:29:21	1:07:54	7 1:12:41	5
			1:07:54	7 2:20:35	6
7	[09]	Chinese Taipei	Hsiao Kai	Chen Cher	
		4:12:37	1:05:11	6 1:36:01	8

Relay ranking

Class WE

Rank	Result	Number	Team name	Memo
1	2:03:19	[56]	China	
2	2:21:29	[51]	Japan	
3	2:49:29	[55]	China	
4	2:51:00	[52]	Japan	
5	3:00:22	[53]	Kazakhstan	
6	3:28:16	[57]	Chinese Taipei	
7	3:43:03	[59]	Hong Kong	
			^ Leq. 3 Finish	

Current Time

01:09:05

Network

Online (stout2)

AsOC2010 Relay

Competitor Count

Entry 459

Pre Entry 459

Direct Entry 0

Absent 62

Start 397

Finish 397

Not yet finished 0

Suspicious List

Count 0

Detail Invisible

Hsiao Kai Yuan

ME-1 Chinese Taipei

Result 1:05:11 6th

Detail Split

Quick View ON

Ver. 2.08 Pre. 7

Print

Relay Result List

Printer Canon Inkjet iP4200

Relay Class

Select all

Clear all

☒ ME

☒ WE

☒ M21

☒ W21

☒ M35

☒ W35

☒ M45

Class

Select all

Clear all

☐ ME-1

☐ ME-2

☐ ME-3

☐ WE-1

☐ WE-2

☐ WE-3

☐ M21-1

Course

Select all

Clear all

☐ M21\_A

☐ M21\_B

☐ M21\_C

☐ M35M20\_A

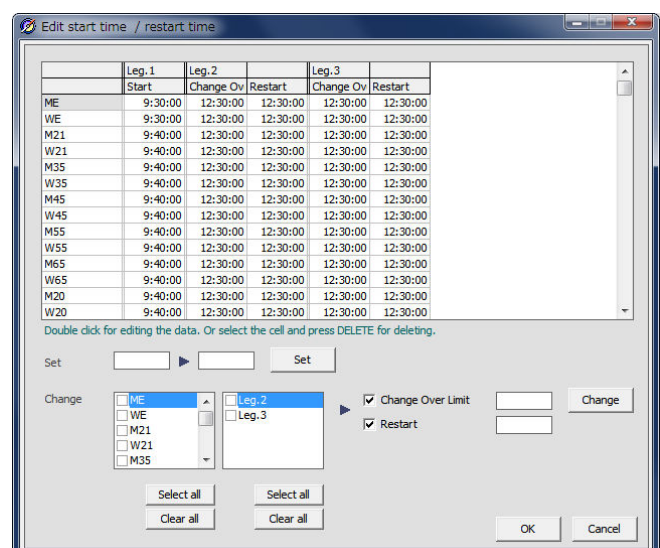
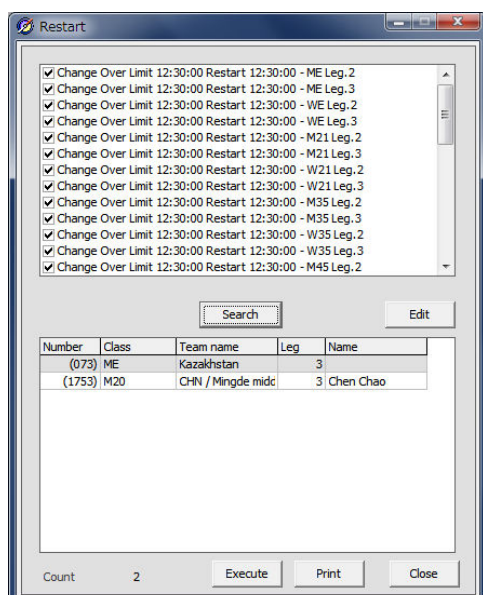
☐ M35M20\_B

☐ M35M20\_C

☐ ME\_AX

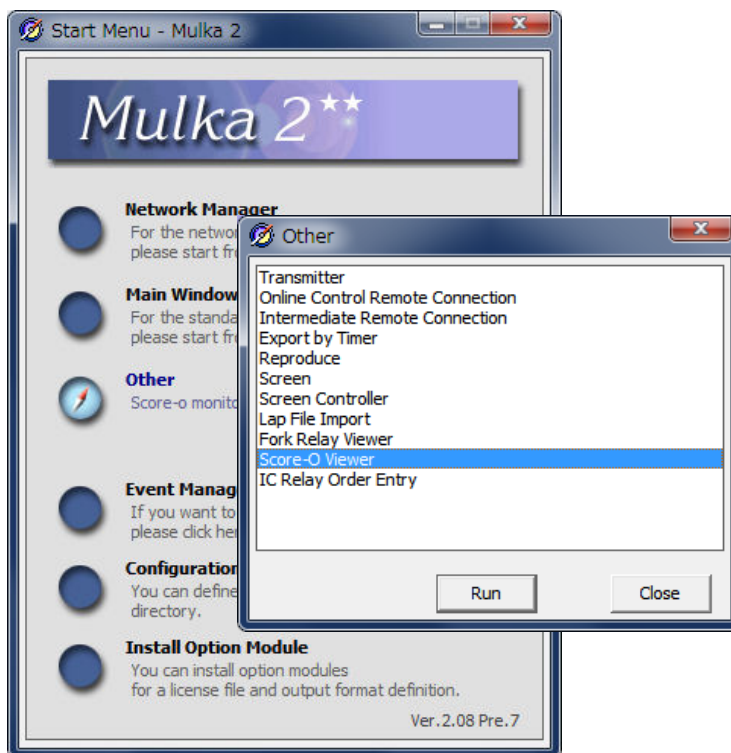
Preview Print Close

- How to use E-cards effectively
  - Normally, E-cards used for the Relay events are defined in advance for each team and running orders.
  - However, if the team orders have not yet fixed in advance, enter E-card numbers in the bib number field of each running order of "Startlist.dat" file, leaving the names blank.
  - It is also possible not to define E-cards in advance. In such case, the E-card numbers will not be input in "Startlist.dat" file. The bib numbers will be entered at the time of reading the E-card.
  - The name of competitor appears on the window when the card is read. You can read out the name to confirm if the competitors in the team run in the assigned order.
- Some important points for reading the cards
  - In Relay events, problems of competitors using inappropriate E-cards or forgetting to activate the cards.
  - When inappropriate cards are used, the results may be shown as "DISQ" or the latter runner looks to have finished faster than the former runner.
  - If suspicions results are found, call out the relevant competitors to ask for the details.
  - An alert is shown when the competitor forgot to activate. In this case, check the recorded data to confirm if the competitor visited the controls correctly.
- Restart in Relay events
  - The restart time can be set or modified from [Relay] menu.
  - Before the restart time, use "Restart" function to print the list of competitors who will restart. At the time of restart, use the list to check if all competitors on the list is restarting.
  - After restarting, use "Restart" function again then click "Execute" button to deal with restart data processing.
  - The restart data processing means that the start time of the restarting competitors is changed to the restart time, from the time of the previous competitor in the team finishes.
  - To regard the team results as "Reference", set the conditions manually.



## ■ Managing score-o event

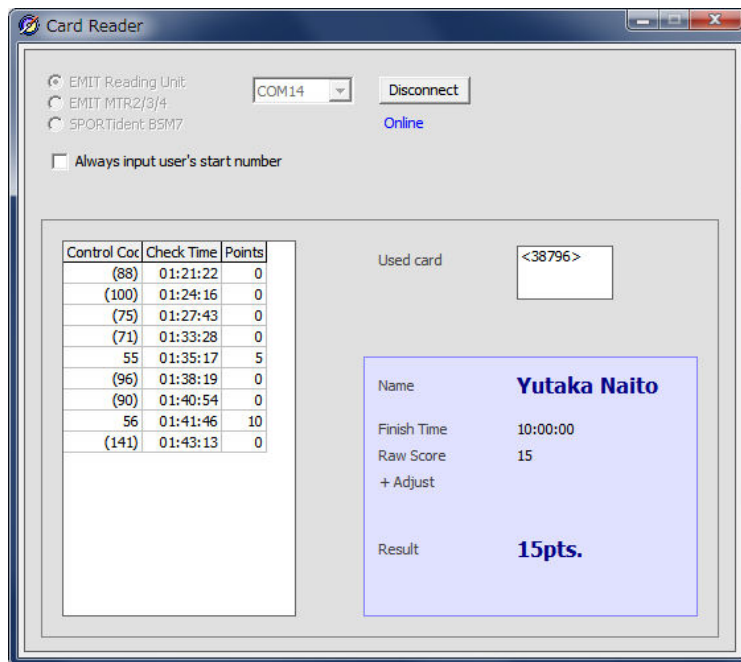
- Necessary data and settings
  - Add "Score.dat" file and "Option.dat" file in a full set of files for individual events.
  - In "Class.dat" file, describe the competition time deduction rate if exceeding the competition time, the finish closing time, as well as class name.
  - In "Score.dat" file, describe the points of each control for each class.
  - In "Option.dat" file, describe a sentence that means "this event is an score Orienteering event."
  - See the sample data for more details.
- Softwares used for Score Orienteering and Rogaining
  - Score-O Viewer is mainly used for Score Orienteering and Rogaining.
  - Score-O Viewer can start by clicking "Menu"->"Other" and select from the shown functions.



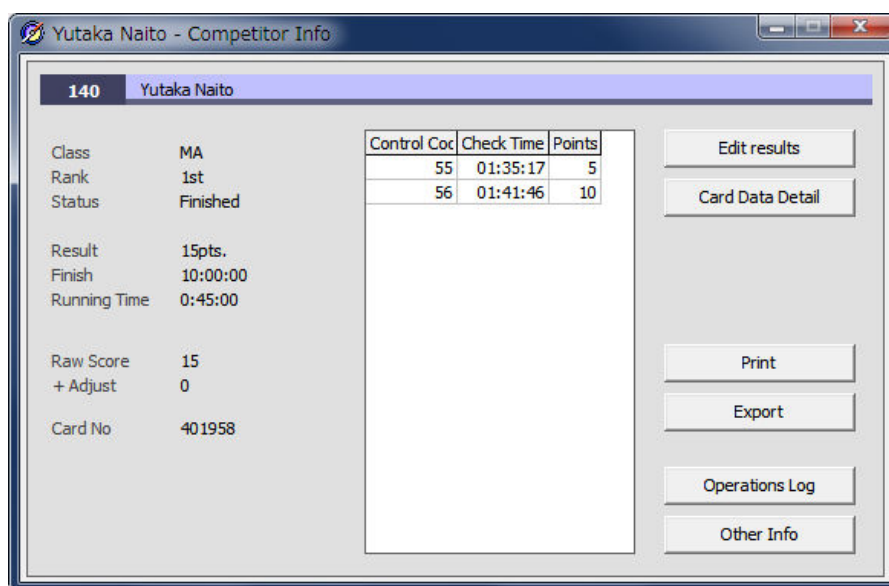
- Most of tasks, including reading E-card, modifying the results, and printing the preliminary results are available by Score-O Viewer. However, some functions are not installed in Score-O Viewer. Please use the "Main Window" in these cases.
- Both Score-O Viewer and Main Window use the same data files. Therefore, you can modify the data such as changing the names in whichever softwares.



- Reading E-cards
  - Click [Input/Read] menu -[Read card] of Score-O Viewer
  - When an E-card is read, the name and points of the competitor appears on the screen.



- Modifying the results
  - Double click the intended competitor on the screen, then "Competitor Information Window" of Score-O version appears.
  - Click "Edit Result" button to show "Edit Result Window".
  - In Score Orienteering, the points can be modified by defining the visited controls, as well as inputting the point directly.



**Edit results**

Name: Yutaka Naito

Finish Time: None

☒ Change 10:00:00

☐ Not yet finished ☐ DNS

☐ Not Compete ☐ DISQ

☒ Input scores according to visited controls

Control Code:  Add

☐ Input time of check

Control Coc	Check Time	Points
55	01:35:17	5
56	01:41:46	10

Delete

Up

Down

Clear

☐ Input score directly

Raw Score:

+ Adjust:

☒ Deduct points by the finish time.

☐ Adjust points manually.  = 15pts.

OK Cancel

- Printing a result report
  - A splits sheet can be provided for competitors in Score Orienteering.
  - Auto-printing is available by selecting [Tool] menu- [Auto Print Setting]
  - In the splits sheet Score Orienteering, competitors can see the time and points of each control they visited.
  - By printing the report manually, click "Print" button on "Competitor Information Window" i.
- Other functions
  - Two E-cards per competitor can be used in the programme.
  - To use two cards, describe both card details in "Startlist.dat" file.
  - You can use more than 50 controls in a competition if two E-cards are registered.
  - There is no restriction of the orders of using the two cards. However, the clock installed in the card will automatically stop after a certain time if not in use. To avoid this problem, it is recommended to use them one after another.

## ■ Data file specification

- General Information
  - Create a folder at each race and make files in this folder.
  - File format = CSV or Tab separated text (except Event.dat and Options.dat). Describe field name in first line and fill in data after second line.
  - Encoding = ASCII or DBCS supported by OS or Unicode (UTF16LE).
- Kind of data files
  - Event.dat = Event information such as event name, date and terrain.
  - Class.dat = Class information such as class name, maximum running time and number of prizes.
  - Course.dat = Course information such as course length, climb and control code of each control.
  - Startlist.dat = Competitor's information such as bib-no, name, club, start-time, EMIT-card/SI-card number.
  - Intermediate.dat = Intermediate control information. This file is optional.
  - RelayClass.dat = Class information for relay event such as number of team, mass start time.
  - RelayTeam.dat = Team information for relay event such as team name, bib number of each member.
  - Score.dat = Score of control points for score event.
  - Options.dat = This file is required only score event.
  - Changes.dat = Operations on the Mulka2 are stored in this file.
  - Operations.log = Log file of the operation on the Mulka2.
- Event.dat
  - This file is not CSV/Tab separated format.
  - Describe as "ITEM = VALUE" at each line in plain text.

ITEM	VALUE
EVENT_NAME (mandatory)	Name of the event
EVENT_DATE (mandatory)	Date of the race. YYYY/MM/DD format.
TERRAIN_NAME	Name of the terrain / map
FILE_NAME (mandatory)	This value is used in exporting files such as html of results and start list.
DISQ_EXPRESSION	This value is used in publishing the results of the competitors who are disqualified.
IGNORE_IRREGULAR_RESULT	Set a value that indicates whether competitors who may start at late time are noticed or not. Possible Values : True (=ignored), False (=noticed, default)
MILLISECOND_ORDER	Set a value that indicate the unit of records. Possible Values : 0 (=second, default), 1 (=0.1second)
EVENT_ID	This value is generated by Event Manager. This value should be different for each event.

- Class.dat

Field name	Contents
CLASS NAME (mandatory)	Name of the class
COURSE NAME	Name of the course defined by Course.dat. If the course is different between competitors such as relay event, this field should be blank. In this case, write the course name at Startlist.dat.
PRIZE	The number of prizes. 0 is default.
QUALIFY	The number of the competitors who can be qualified. This value is used at qualification race.
LIMIT TIME	Maximum running time.Format is "HH:MM" or "MMM" In score event, start time and this value decide the advertised finish time.
FINISH CLOSE	The time of the finish closing. Format is "HH:MM" Competitors who finished after this time are disqualified.
INTERMEDIATE:1, ...	Set the name of the intermediate control defined by Intermediate.dat.
DEDUCTION RATE	This value is used penalizing competitors who finished late at score events. If the score is reduced 10 points per 60 seconds, this field value is "60". This value is valid only score event.
DEDUCTION POINT	This value is used penalizing competitors who finished late at score events. If the score is reduced 10 points per 60 seconds, this field value is "10". This value is valid only score event.

- Course.dat

Field name	Contents
COURSE NAME (mandatory)	Name of the course
SHORT NAME	This value is used in exporting the results of the relay event. This value is valid only relay event. If the course name is "M21E-AX" or "M21E-BY", short name is "AX" or "BY".
LENGTH	Course length. Unit of this value is kilometer or meter.
CLIMB	Climb of the course. Unit of this value is meter.
CONTROLS (mandatory)	Number of controls.
S (mandatory)	Possible Values : 0(=lift-up/punching start), blank(=normal start)
1, 2, 3, ... (mandatory)	Control unit code of each control point.
F (mandatory)	Control unit code of finish. If it is not punching finish, set blank.

- Startlist.dat

Field name	Contents
STNO (mandatory)	Bib number
CLASS NAME (mandatory)	Name of the class
COURSE NAME	If the course assigned is different between competitors, write here the course of each competitor.
START TIME (mandatory)	Start time. If the competitor can start at anytime, let this field blank.
NAME (mandatory)	Competitor's name
NAME2	Competitor's name in another language (if necessary)
CLUB	Club name
CLUB2	Club name in another language (if necessary)
GROUP:1, ...	Name of the group member (for group class)
COUNTRY	Nationality (if necessary)
AGE	Age of the competitor
SEX	The distinction of sex Possible Value : M or H (=Male), F or W or D (=Female)
CARD NUMBER	EMIT-card/SI-card number
CARD MEMO	Memo about the EMIT-card/SI-card (for example, "Rental")

- Intermediate.dat

Field name	Contents
POINT NAME (mandatory)	Name/Identifier of the place where competitors go along as an intermediate control.

- RelayClass.dat

Field name	Contents
RELAY CLASS NAME (mandatory)	Name of the relay class
START TIME (mandatory)	Time of the mass start
MEMBER COUNT (mandatory)	Number of the team member
CHANGE OVER CLOSE:2, ...	Closing time of the change over to 2 <sup>nd</sup> , 3 <sup>rd</sup> , ... leg competitor.
RESTART:2, ...	Re-start time of the 2 <sup>nd</sup> , 3 <sup>rd</sup> , ... leg competitor.
INTERMEDIATE:1, ...	Set the name of the intermediate control defined by Intermediate.dat.

- RelayTeam.dat

Field name	Contents
RELAY CLASS NAME (mandatory)	Name of the relay class
TEAM NUMBER (mandatory)	Team number
TEAM NAME	Name of the team
TEAM NAME2	Name of the team in another language (if necessary)
MEMBER:1, ... (mandatory)	Bib number of the member

- Score.dat

Field name	Contents
CODE (mandatory)	Control code shown on the map.
UNIT	Control unit code (emit / SPORTident) If there is no UNIT field in Score.dat, Mulka2 regards that the control code on the map and unit code is same.
<Class Name> (mandatory)	Points of the control.

- Options.dat

- This file is not CSV/Tab separated format ,but plain text.
- This file is required only at score event.
- At score event, describe "SCORE = Score.dat" in the first line.