

DT-CONFIG SOFTWARE

Config software for D2 systems

USER'S MANUAL

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DT-CONFIG Manual_V1 20091203

1. Introductions

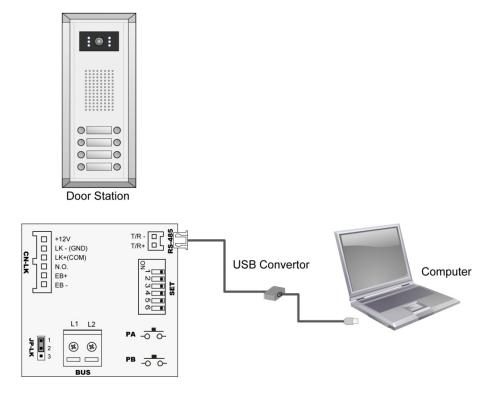
DT-CONFIG software is a powerful configuration and debug tool to setup the 2-wire system. As simplified software tool, DT-CONFIG allows installers to check and program Door Stations rapidly, which is especially useful in complex installation.

DT-CONFIG allows you to view device properties, modify parameters, re-locate Call Buttons mapping and establish Name List in a PC and then download to the Door Station. Furthermore, you can use DT-CONFIG as a assistance in field debug and maintains, by means of printing Programming Table, online search and diagnose tools.

DT-CONFIG contains a project management utility, which helps installers manage project and device information.

2. System Requirement and Connection

DT-CONFIG can be installed in a PC or laptop with Microsoft Windows XP, VISTA, Server 2003 or Server 2008 operating system, and at least 512M memory, and 100M free hard disc space. Please note, a spare USB2.0 port is necessary to connect interface converter.



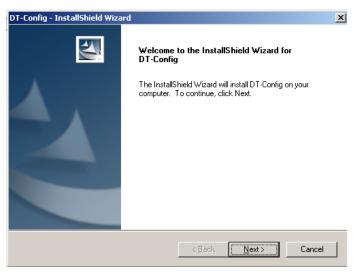
Note . The Monitors in above diagram are not necessary.

USB2.0 to RS485 interface converter is packaged in DT accessory box.

3. Software installation

3.1. Install the software package

3.1.1. Insert the software CD, double click the setup.exe file (Windows will automatically run setup, if your PC auto run option isn't disabled), to launch the install process.



3.1.2. Fill the User Name and Company Name information.

DT-Config - InstallShield Wizard		×
Customer Information Please enter your information.		AZA
Please enter your name and the name of the com	pany for which you work.	
User Name:		
User		
Company Name:		
Company		
InstallShield		
	< <u>B</u> ack <u>N</u> ext>	Cancel

3.1.3. Use default install path, or change the path if needed, then click Next button.

DI	-Config -	InstallShield Wizard		×
Choose Destination Location Select folder where setup will install files.				
\$		Install DT-Config to: D:\DT Software\DT Config		<u>C</u> hange
In	stallShield –		< <u>B</u> ack	Cancel

3.1.4. confirm to start installation.

DT-Config - InstallShield Wizard	×	
Ready to Install the Program The wizard is ready to begin installation.	No.	
Click Install to begin the installation.		
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.		
InstallShield		
< <u>B</u> ack	Cancel	

3.1.5. After the installation is finished, confirm and exit.

DT-Config - InstallShield Wizard		
	InstallShield Wizard Complete The InstallShield Wizard has successfully installed DT-Config. Click Finish to exit the wizard.	
	< Back Finish Cancel	

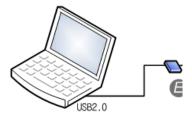
3.2. Install the USB to RS485 converter hardware driver

This is very important step, must be careful to make sure

the converter has been installed correctly.

Please note, in this step, you don't need to connect with

the Door Station, use converter alone.



3.2.1. Connect the USB to RS485 converter to your PC USB

port. Wait 5 seconds or more, Windows system will show that a new hardware is found.

Found New Hardware Wizard			
Found New Hardware Wizard	Welcome to the Found New Hardware Wizard Windows will search for current and updated software by looking on your computer, on the hardware installation CD, or on the Windows Update Web site (with your permission). Online privacy information		
	Can Windows connect to Windows Update to search for software?		
	< Back Next > Cancel		

3.2.2. Select the last item 'No , not this time', then chick Next button.

Found New Hardware Wizard			
	Welcome to the Found New Hardware Wizard		
	Windows will search for current and updated software by looking on your computer, on the hardware installation CD, or on the Windows Update Web site (with your permission). <u>Online privacy information</u>		
	Can Windows connect to Windows Update to search for software?		
	○ Yes, this time only		
	 Yes, now and givery time I connect a device No. not this time 		
	No, not this time No, not this time		
	Click Next to continue.		
	< Back Next > Cancel		

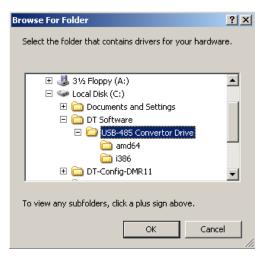
3.2.3. Select 'Install from a list or specific location (Advanced)', then click Next button



3.2.4. Select 'Include this location in the search', then click Browse button.

Found New Hardware Wizard		
Please choose your search and installation options.		
Search for the best driver in these locations.		
Use the check boxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed.		
🗖 Search removable media (floppy, CD-ROM)		
✓ Include this location in the search:		
D:\ Browse		
O Don't search. I will choose the driver to install.		
Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware.		
< <u>B</u> ack <u>N</u> ext> Cancel		

3.2.5. Select the 'USB-485 Convertor Drive' of DT-CONFIG software install path, then click OK button.



3.2.6. After the browse operation, click Next button.

Found New Hardware Wizard			
Please choose your search and installation options.			
Search for the best driver in these locations.			
Use the check boxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed.			
Search removable media (floppy, CD-ROM)			
✓ Include this location in the search:			
C:\DT Software\USB-485 Convertor Drive			
O Don't search. I will choose the driver to install.			
Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware.			
< <u>B</u> ack <u>N</u> ext > Cancel			

3.2.7. Windows will indicate the Wizard has been completed, then click Finish button.

Found New Hardware Wizard		
	Completing the Found New Hardware Wizard	
	The wizard has finished installing the software for:	
	USB Serial Converter	
	Click Finish to close the wizard.	
	< Back Finish Cancel	

After 4.2.1 to 4.2.7 operation, you have installed the **USB Serial Converts**. In the next steps, you will install **USB Serial Port**, similar with previous. 3.2.8. Wait a few seconds, Windows will show a new USB Serial Port is found, select and operate as previous steps. Firstly, Select 'Install from a list or specific location (Advanced)', then click Next button.



3.2.9. Select 'Include this location in the search', then click Browse button.

Found New Hardware Wizard			
Please choose your search and installation options.			
• Search for the best driver in these locations			
Use the check boxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed.			
Search removable media (floppy, CD-ROM)			
Include this location in the search:			
C:\DT Software\DT Config\USB-485 Convertor Driv 💌 Browse			
O Don't search. I will choose the driver to install.			
Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware.			
< <u>B</u> ack <u>N</u> ext > Cancel			

3.2.10. Select the 'USB-485 Convertor Drive' of DT-CONFIG software install path, then click OK button.

Br	owse For Folder	<u>?</u> ×		
	Select the folder that contains drivers for your hardwa	re.		
	🗄 🛃 31⁄2 Floppy (A:)			
	🖃 🥯 Local Disk (C:)			
	🗉 🛅 Documents and Settings			
	🗆 🚞 DT Software			
	🗆 🧰 USB-485 Convertor Drive			
	amd64	_		
	i386			
	E DT-Config-DMR11	•		
To view any subfolders, click a plus sign above.				
	OK Cance			

3.2.11. After the browse operation, click Next button.



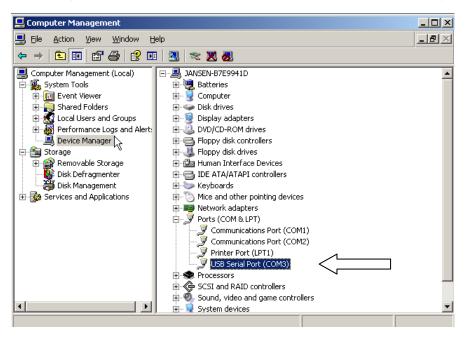
After 4.2.8 to 4.2.11 operation, you have installed the **USB Serial Port**. By now, the USB converter related drivers have been installed.

3.3. Get Te COM Port Number

3.3.1. Operate as 'Start->My Computer', by right click on mouse, then select 'Manage', to launch '**Computer Management**'

Manage Your Server	💓 My Computer	
		Open E <u>x</u> plore
Command Prompt	Control Panel	S <u>e</u> arch Manage
Windows Explorer	4 Administrative Too	Manage Map <u>N</u> etwork Drive
	Printers and Faxes	Disconnect Network Drive
Notepad	Help and Support	Show on Desktop Rena <u>m</u> e
	Search Search	Properties
_	7 <u>R</u> un	
All Programs		
All Programs 🕨		
	🖉 Log Off 🛛 🛈 S	5h <u>u</u> t Down
🕂 Start 🛛 🚱 🎯		

3.3.2. Locate Device Manager, and click and expand 'Ports (COM & LPT)', you will find the 'USB Serial Port (COM?)' item. Please note, in different PC, the COM number is different, just remember it, this information will be used for next step.



3.4. Start DT-CONFIG and Setup The COM Port

3.4.1. Run DT-CONFIG software

🔤 DMR11-Config - UnNam	ied				
<u>F</u> ile <u>S</u> etting <u>H</u> elp					
Information Para	ameter	NameList	Access Control	Debug	Trace
Device Information					
Model	Unknown				
Hardware Version	Unknown		1		
Software Version	Unknown		RS-485		
Serial No.	Unknown		RS485-US	SB convertor	
Access Control	Unknown			1	
Access Card Number	Unknown				
Work Voltage	Unknown		Please con	nect device	
Standby Voltage	Unknown				
⊂Installer's Information Tags —					
Project Name				Clear Tags	
	N			🕂 Download	Tags
🖌 👚 Upload					
V Com					

3.4.2. Select 'Setting \rightarrow COM Setting', and select the COM port which was found in 3.3.2

Com Setting	X
Com Port COM3	
<u>O</u> K <u>C</u> ancel	

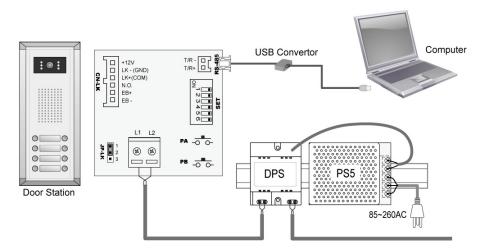
🕻 Com

3.4.3. After the correct COM port has been selected, the COM PORT ICON will stop flashing.

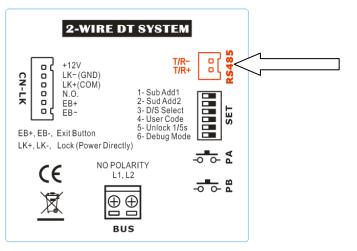
This ICON means the USB to RS485 converter has been connected.

4. Connect A Door Station

4.1. Connect the Door Station, DPS, PS5 correctly, then power on the system. However, you can connect the Door Station with Monitors also installed, such as in a finished installation.



4.2. Connect the 2pin plug of the converter, to the RS485 socket in Door Station, which you will find on the wiring box.



4.3. After connecting correctly, a window will pop up, to indicate that a Door Station is found.



Select Yes to read configuration data of the connected Door Station, or No to use default.

4.4. After 4.3 confirm operation, the Device Icon will be light to show a Door Station is online.

👝 Device

This means a Door Station is connected correctly.

5. General Overview Of DT-CONFIG Software

5.1. Main Menu

Information Par	ameter	NameList	Access Control	Debug	Trace
Device Information					
Model	Unknown				
Hardware Version	Unknown				
Software Version	Unknown		RS-485		
Serial No.	Unknown		RS48	5-USB convertor	
Access Control	Unknown	2		1	
Access Card Number	Unknown				
Work Voltage	Unknown		Please co	nnect device	
Standby Voltage	Unknown				
Installer's Information Tags—					
Project Name				Clear Tags	
Block Name				🕀 Download 1	Tags
				1) 	

Main Menus

- File menu includes all project operations, such as New, Open, Save, Save As and Exit.
- Setting menu includes Com Setting and Language (Not included in Demo version).
- Refer **Help** menu for help contents.

Information (Read/Upload from connected Door Station, can't be changed)

 Product Model, Hardware Version, Software Version, Serial, Access Control, Access Card Number, Work Voltage, Standby Voltage.

Note. Serial is a unique number programmed in assemble line and used for tracking

Upload Button

Upload function will read the connected Door Station information, including the following:

- Information on property page, and Parameters listed on Parameter page
- Panel models, Call Button mapping, Room Number and Name table on **NameList page**. After upload operation, the result will be showed as below.



5.2. Parameter Setup

Information Parar	neter	NameList	Access Control	Debug	Trace
Device Parameter					
Monitor Timing	30	:	To set Limitation of Monitoring	operation.	
Camera Switch Timing	40	•	To set switch time when multi E	Door Stations are installe	d.
Wait Timing	30	:	To set called Monitor's wait and	d ring time.	
Talk Timing	90	:	To set Limitation of Monitor's ta	alking operation.	
Unlock Timing	5	•	To set how long the door keep	s open after unlock.	
Mon Speak	Enabled	•	To enable Monitor speak to Do	or Station in Monitoring.	
Mon Unlock	Enable	•	To enable Monitor open the do	or in Monitoring.	
Unlock Relay	Normally Open	-	To select the unlock relay dry o	contact type.	
Ring Numbers	Ring Once	•	To set ring numbers of the Mor	hitor	
Restore To Default	Retrieve default v	value of liste	d parameters		
👎 Download Parameter	Download all lister	d parameter	s to online Device		
😭 Upload					

Items	Descriptions	Default
Monitor Timing	From 6s to 600s. To set Limitation of Monitoring operation.	30 s
Camera Switch Timing	From 6s to 600s. When multi Door Stations are installed, set the Monitoring time of this Door Station, and will be switched to next Door Station after this time.	
Wait Timing	From 10s to 600s.To set call wait and ring time, if Monitor don't answer a call within this time, calling will be canceled.	30 s
Talk Timing	From 10s to 600s. To set Limitation of talking operation.	90 s
Unlock Timing	From 1s to 99s. To set the time that how long the door keeps open when lock is released.	5 s
Mon Speak	To enable Monitor under monitoring state can speak to Door Station at same time. This option can be enabled/disabled.	Enabled
Mon Unlock	To enable Monitor under monitoring state can open the door at same time. This option can be None (disabled); and other 3 options all support open door operation, but with different close timing Support, None Delay (Close the Monitor after unlock), Delay 5s (Close the Monitor, 5s after unlock).	
Unlock Relay	To select the unlock relay dry contact type, for different lock types. This option can set to Normally Open or Close.	Normally Open
Ring Numbers	To select the ring mode: ring once, ring twice, ring thrice and cycle ring.	Ring Once

Restore to default Button

This operation will retrieve default value of listed parameters.

Download Parameter Button

This operation will download all the parameters on this page to connected Door Station.

5.3. NameList Setup

DIR11-Config				
File Setting Hel	Parameter	NameList Access	Control De	bug Trace
Panel Config Main Panel S04 V	Extend Panel 1 Extend Px 512 • • • •	anel 2 Cancel Button	Manage Button	User Code Start 1
User Code R	oom No. Name Lable	Monitor Dip	Call Button	
01				Import Name List
		1 2 3 4 5 6 ON DP		Export Name List
02				Sort By RoomNo
03				Sort By Name
04		0N DP 1 2 3 4 5 6		Print Download Button Positions
05				Download NameList
👚 Uploa	d			
🗙 Com 🛛 🛞	Device			

Panel Configuration

To select the Door Station and Expanded Panel combination in a specific entrance. Please note the total Call Buttons are limited to 32. If **Cancel Button** and Manage Button (**Call Guard Unit**) are needed, click [Control Button] check option, and then specify the Call Buttons to be used. If User Code of this entrance isn't regularly arranged, set [Start User Code] if necessary. After above operations, press **Auto Set** button to create a User Code mapping. You can modify the User Code mapping if necessary. Also, you can click Clear Button Position button to clear the mapping, and assign the Call Button by manual.

User Code, Name List and DIP Programming information

Edit the grids to fill Room No and Name Label, please note limitation less than 20 chars. You can sort the table by Room No, or by Name Label. Use Download Button Position button to download Call Buttons mapping to connected Door Station.

After editing, you can export the Name Label and User Code information to TXT file, so as to create a printable name label file, which can be used to replace the Door Station name labels.

Download NameList information

In 2-wire DT system, Monitors will display a intercom NameList menu for intercom calling. This name dictionary is transmitted from Door Station, and should be previously downloaded from DT-CONFIG software. After editing NameList information in software, press **Download NameList** to save into Door Station. In field installation, when Monitors are installed, use Door Station PA button to transmit name dictionary to Monitors, see technical manual for reference.

Print User Code programming table

Use Print Button to print a field programming reference document, it is much useful in installation and after-installation service.

Part of printing job as below, including configuration and reference table:

DOOR STATION CONFIGURATION

Device		
Project Name	VTK SAMPLE PROJECT	
Device Name	Building 7, Gate 1	

... ...

User Code Room No Name Dip Button Position . 01 7B-802 Jim, Zhang . 02 7B-831 Cherry, Shi . 03 7B-833 David, Lo . 04 7B-835 Calo, Liu . 05 7B-834 Jana, Joe . 06 7B-821 Vicky, Zhou 1 07 7B-812 Ajun, Zhang . 08 7B-836 Jacko, Zhang

USER CODE PROGRAMMING TABLE

6. Assess Control settings

DURII-Config - UnNamed File Setting Help	
Information Parameter	NameList Access Control Debug Trace
Device Operation File Opera	tion
Backup to File	To upload card data from device and save to a backup file.
Restore From File	To select a card data backup file and download, note that old cards will be lost!
Add Card	To add User Cards to device directly.
Delete Card	To delete User Cards from device directly.
View Card	To view the User Cards information.
Clear Card	To clear User Cards of device, please be careful.
Setup Master Card	To display and change Master Cards of device.
Note: Device must be co	onnected before operation!
🔀 Com	

Device Operation

This page includes all the Card operations in the device: **Backup to File, Restore From File, Add Card, Delete Card, View Card, Clear Card, Setup Mater**.

DER11-Config - 1	JnNamed				
<u>F</u> ile <u>S</u> etting <u>H</u> elp					
Information	Parameter	NameList	Access Control	Debug	Trace
Device Operation	File Operation	l			
	Card List				
New		Card No.	User Code		
Open					Add
Save	7				Delete
Save As					Clear All
Append From Devic	e			Quick	Scan Input
Append From File				User Co	de 🗸
Download To Devic	e			Card No	
	Total C	ard Count: O		Sca	n From Device
Current File Name:	UnNamed				
L					
💢 Com 🛛 🛞 Devi	ce				

File Operation

In this tab you can manage the file that include all the card information. You can edit the file to change the information, such as add/delete user cards to a specific User Code to the exits file, clear all card register information, and then update to the device or save the file as a backup.

7. Use DT-CONFIG As Debug Tools

7.1. Debug Tool

DIR11-Con		Named					
<u>F</u> ile <u>S</u> etting Information		Parameter	NameList	Access	Control	Debug	Trace
User Code 1	- 8	Conlin	ne Check Diag	nose	Print	Export	
User Code	Room No.	Name L	able	Monitor Dip	Online	Working Voltage	Standby Voltage
🗙 Com							

User Code Range

To change the User Code start and end address, only set valid range will save more time.

Online Check Button

Use this button to start Online searching, and the result will be showed in list window. Online search function is designed for the purpose of getting a quick view of the Monitors installing situations, or to check if each of them works or not. This is very useful for installation maintain.

Diagnose Button

Use this button to start Diagnose operation, and the result will be showed in list window. Diagnose operation will check the Monitor's working voltage and standby voltage, video signal presentence, and data communication.

By means of this tool, if a Monitor passes the test, generally this Monitor should works well.

Print Button

To print the debug result window information, for installation delivery documentation or memo.

Export Button

By means of this tool, if a Monitor passes the test, generally this Monitor should works well. To export the debug result window information, you can analyze it in EXCEL sheet.

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7.2. Trace Tool

le	Setting		UnNamed								
	Information		Parameter		NameLis	st.	Access Co	ontrol	Debug		Trace
5	Start Trace	Stop	Trace	Clear Trace		Print	Ex	port			
1	No.	Time	Transfer St	atu Source	Address	Destination	Address	Command Code	1	Command [Data

About trace

TRACE tool will display all data communication information presented on 2-wire BUS, which can be a high-end tool used by expertise to check the system stability, or locate the problem more easily in a complex installation.

Please note, it is not suitable for normal installers, as the data streams are complex. However, installers can send back the trace log, thus the engineers can analyze and help.

Start Trace Button

To initiate and start trace operation, when system works, result will be automatically send back and displayed in log window.

Stop Trace Button

To stop trace operation.

Clear Trace Button

To clear the log listed in window, when you need to trace a new operation, it is useful.

Print Button

To print the log listed in the result window.

Export Button

To export the log listed in the result window to a TXT file. When you need to send back the trace log, or analyze in EXCEL sheet, you should export the log first, then open it in EXCEL.

20

Appendix. Print Document of a sample installation - 1

DOOR STATION CONFIGURATION

Device				
Project Name	VTK SAMPLE PROJECT			
Device Name	Building 7, Gate 1			
Information				
Model	MR11			
Hardware Version	MR11-CT A1.1 V			
Software Version	01-001 D			
Serial No				
Paramter				
Monitor Timing	30			
Camera Switch Timing	40			
Wait Timing	30			
Talk Timing	90			
Unlock Timing	3			
Mon Speak	Enabled			

21

Support

Mon Unlock

Print Document of a sample installation - 2

User Code	Room No	Name	Dip	Button Position
01	7B-802	Jim, Zhang	ON DP 1 2 3 4 5 6	
02	7B-831	Cherry, Shi	ON DP 1 2 3 4 5 6	50002
03	7B-833	David, Lo	ON DP 1 2 3 4 5 6	
04	7B-835	Calo, Liu	ON DP 1 2 3 4 5 6	
05	7B-834	Jana, Joe	ON DP 1 2 3 4 5 6	
06	7B-821	Vicky, Zhou	ON DP 1 2 3 4 5 6	
07	7B-812	Ajun, Zhang	ON DP 1 2 3 4 5 6	
08	7B-836	Jacko, Zhang	ON DP 1 2 3 4 5 6	
09			ON DP 1 2 3 4 5 6	
10			ON DP 1 2 3 4 5 6	
11			ON DP 1 2 3 4 5 6	

USER CODE PROGRAMMING TABLE

2

Print Document of a sample installation - 3

User Code	RoomNo	Name	Online	Work Voltage	Stadnby Voltage	Dip
01	7B-802	Jim, Zhang	Online	25.68	25.85	
02	7B-831	Cherry, Shi	Online	25.29	25.43	ON DP
03	7B-833	David, Lo	Offline			
04	7B-835	Calo, Liu	Offline			ON DP
05	7B-834	Jana, Joe	Offline			
06	7B-821	Vicky, Zhou	Offline			DP 2 3 4 5 5
07	7B-812	Ajun, Zhang	Offline			ON DP
08	7B-836	Jacko, Zhang	Offline			

Diagnose

1

Print Document of a sample installation - 4

Trace

Number	Time	Statu	Source	Destination	Code	Command Data
1	18:22:44	Success	34	84	72	
2	18:22:44	Success	84	34	F0	
3	18:22:44	Success	34	38	50	
4	18:22:44	Success	34	84	70	
5	18:22:44	Success	84	34	83	
6	18:22:47	Success	34	84	71	
7	18:22:47	Success	34	38	56	
8	18:22:47	Success	34	88	72	
9	18:22:47	Success	88	34	F0	
10	18:22:47	Success	34	88	72	
11	18:22:51	Test				
12	18:22:54	Success	88	34	80	
13	18:22:54	Success	34	88	76	
14	18:22:54	Test	30	30	30	
15	18:22:56	Success	88	34	81	
16	18:22:56	Success	34	88	76	
17	18:23:01	Success	88	34	81	
18	18:23:01	Success	34	88	76	
19	18:23:04	Test	30	30	30	
20	18:23:04	Success	88	34	82	
21	18:23:05	Success	34	38	56	
22	18:23:05	Success	34	88	76	
23	18:23:08	Success	84	84	86	
24	18:23:08	Success	34	84	76	
25	18:23:08	Success	34	38	57	
26	18:23:12	Success	84	34	81	
27	18:23:12	Success	34	84	76	