



TS2020 CONFIGURATION SOFTWARE VERSION 0.22 TEMPLATE SHARING QUICK SETUP

PRODUCT INFORMATION SHEET

INF085-06

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Introduction

This document is a brief description on setting up and using the TS2020 Template sharing application.

Application Installation

Copy the single file application to a directory location specific to your requirements, full read write access is required.

Command line

The host adaptor address can be specified in a shortcut to the TS2020.exe application. This is needed if the host PC has multiple network interfaces and you wish to use the terminal discovery part of this application.

Command:

TS2020.exe <host adaptor IP address>

e.g:

TS2020.exe 192.168.4.53

Compatible firmware

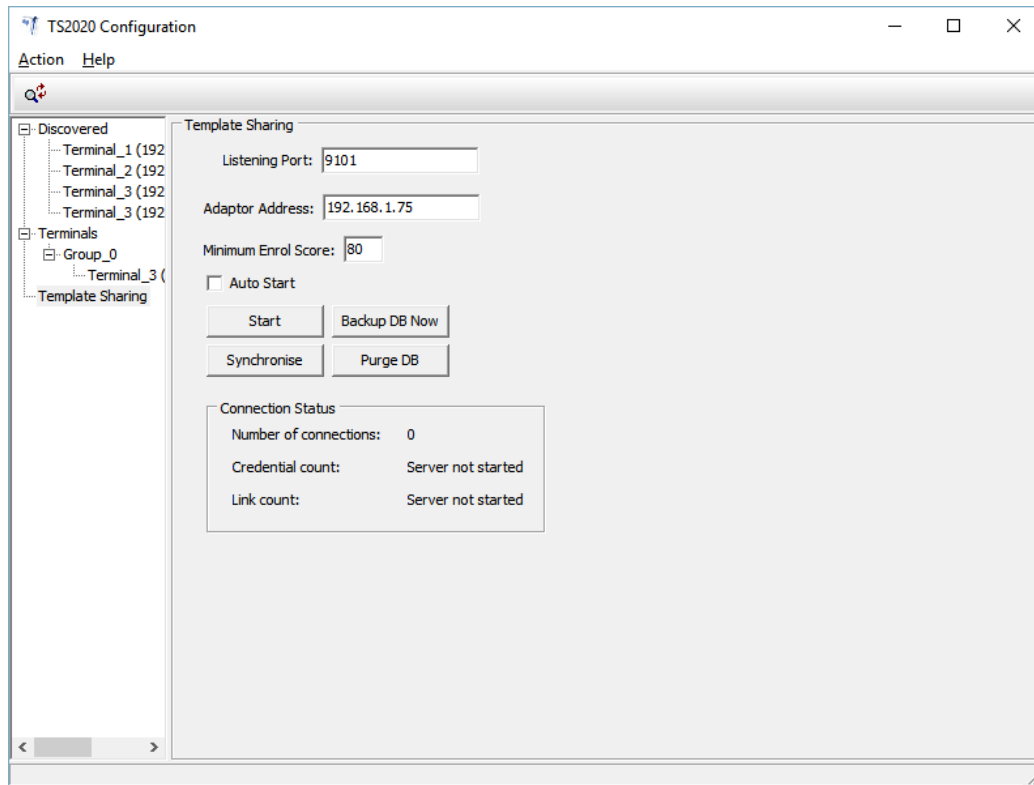
Minimum level of terminal firmware required is **S0-HAL-010**

Extra supported functions include:

Function	Minimum level of firmware required
Minimum Enrol Score setting	S0-HAL-310
Dual finger Enrolment control	S0-HAL-31A

Template Sharing

Setup



Screen description:

Listening Port

- This is the template sharing communications port. Each terminal will require to be configured to this setting.

Adaptor Address

- This is a specific IP address associated with the network adaptor for which this software will communicate over (only needs to be changed if the PC has multiple adaptors)

Auto Start

- When checked the Template Sharing server will automatically start when this application starts.

This will allow you to start this application on boot up of windows and automatically start the template sharing server.

Minimum Enrol Score

- This is a global terminal setting which determines the minimum level to which enrolments are accepted.

Dual Finger

- **WARNING:** This option should ideally only be set up on an initial setup of a new system. Issues may arise if this is changed once a system is setup.

This allows the complete system to enrol up to two fingers per identity at the terminal.

When in dual finger mode the available quantity of identities is reduced by half.

If left unchecked (default setting) then the enrolment process at the terminal is restricted to a single finger per identity. The option for a second finger enrolment is removed from the diagnostic.

Start

- This button Starts and Stops the Template sharing element of this application.

Synchronise

- This button allows the administrator of the system to re-synchronise the entire template sharing system. When this button is pressed the Link Count will be cleared. When terminals next communicate with this application the Link count will increase.

Backup DB Now

- By default this application saves changes to a database every 5 minutes. With this button any changes that have taken place are stored instantly.

Purge DB

- Use with caution. This button will remove ALL information from the database. When the TS2020 terminals next communicate with this application all of the templates that existed in those terminals will be removed.

Number of connections:

- This shows the actual number of fingerprint terminals connected to this application.

Credential Count:

- This shows the number of enrolled users which will be shared to all fingerprint terminals.

Link Count:

- This shows the number of terminals that either are connected or have connected to this application.

1) Select the Template Sharing tree item.

2) Settings:

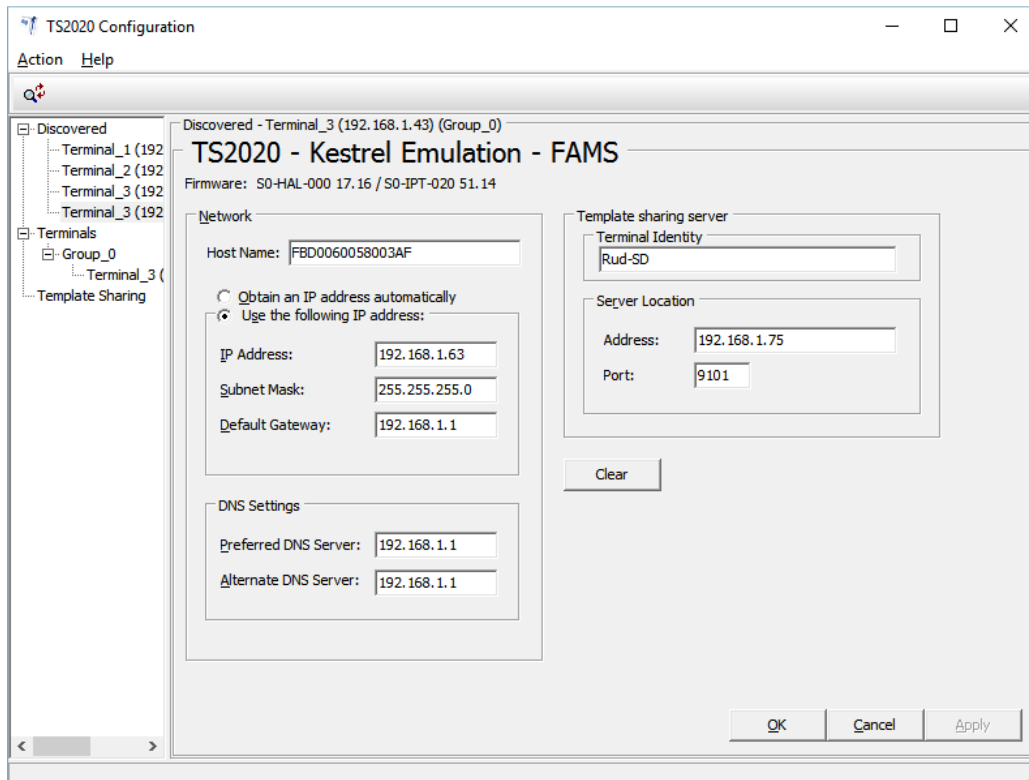
Listening Port This is the communications port which Fingerprint TS2020 terminals will connect to. To configure this communications port on the TS2020 terminals refer to the [Terminal Discovery](#) section.

Adaptor Address If the PC that this software has been installed on has only one network adaptor then this can be left as 0. If the PC has more than one adaptor (including virtual adaptors) then the IP address of the specific adaptor you require this software to communicate over needs to be specified. If an IP address is required refer to the [Appendix](#) to determine the IP address of your adaptors.

3) Click Start. The application is now ready to accept terminal connections for template sharing.

4) Configure the TS2020 terminals communication parameters via the [Terminal Discovery](#) section.

Terminal Discovery



Screen description:

Network Parameters

- These are network settings specific to the terminals address on the network. The above screen shows the terminal set to DHCP configuration.
- **Host Name**
 - This is a network host name which by default is unique for each terminal. **Caution** is advised when changing this name i.e. it is advised to keep them unique.
- **Obtain an IP address automatically**
 - Select this to allow the network to allocate the IP address, subnet mask and gateway for the terminal.
- **Use the following IP address**
 - Select this to allow you to allocate fixed values for the IP address, Subnet mask, Gateway and DNS server settings of this terminal.


Template Sharing

- **Template Identity**
 - This identity is used to identify the fingerprint terminal for template sharing. This setting should be unique for each terminal needing to use the template sharing service.
- **Server Address**
 - This is the address of the PC which has the template sharing application running.
- **Server Port**
 - This is the listening port as specified in the template sharing section.

Buttons:

- **Clear**
 - Use with caution. This button allows you to clear ALL battery backed memory.
- **OK**
 - This button sends changes to the terminal, updates the database and resets the terminal to commit changes.
- **Cancel**
 - This button re-loads the terminals current settings.
- **Apply**
 - This button sends changes to the terminal and updates the database.

Template sharing network parameters:

- 1) To discover terminals on a local network either use the menu option **Action/Discover** or click on the toolbar icon .
- 2) After a period of time terminals should be listed in the “Discovering ...” / “Discovered” tree. Example image shown above.
- 3) Click on the terminal intended to be configured.
- 4) Specify a unique (no two identities the same) Terminal Identity for the terminal.
- 5) Specify the IP address of the Template sharing application PC and the communications port. This is the port specified to the “Listening Port” in the template sharing section.
- 6) Click OK to commit the changes. The terminal will restart.

Terminal Operations

The enrolment of users is done through any one terminal connected to the system. In order to gain access to enrolment operations on any one terminal you have to enter diagnostic **41**.

The enrolment options available under this diagnostic are:

1 - Enrol User	4 - Purge
2 - Identify User	5 - Synchronise
3 - Delete User	6 - Detail

Each of these operates as follows:

1 - Enrol User

The Enrol User option is used to enrol a user so that their fingerprint is recognised. The operator/administrator must enter the desired identity for the user (5 digits from 00001 to 49999 for dual and 00001 to 99999 for single enrolment mode). The user is then prompted to swipe their finger twice. An enrolment score will be shown upon a successful enrolment. A successful enrolment is one that is greater or equal to the setting 'Minimum Enrol Score' as specified above.

If the terminal is connected to this template sharing application then a successful enrolment will be transmitted to this template sharing application where it will be stored and distributed to other connected terminals.

PLEASE NOTE:

A good record of user identities is required. If an enrolment takes place on an existing user Identity then that existing identity will be overwritten i.e. the existing user for that identity will no longer be able to use the system.

2 - Identify User

The Identify User option is used to determine whether a given users fingerprint is recognised. The user is prompted to swipe their finger and (if recognised) the identity associated with that fingerprint (along with an indication of the finger used) is reported.

No message will be transmitted to the template sharing application.

3 - Delete User

The Delete User option is used to delete a given user and their associated fingerprint(s). The operator/administrator is prompted to enter the identity of the user who should be deleted. The operation is considered successful if the user does not exist after the delete has occurred; i.e., it is still considered successful if there were no fingerprints associated with the identity beforehand. If the terminal is connected to this template sharing application then a successful locally deleted enrolment on the terminal will send a message to allow the template sharing application to delete the credential from the database. All other connected terminals will be updated.

4 - Purge

The Purge option deletes all users and their fingerprints from the terminal. If the terminal is connected to this template sharing application then this operation is (currently) effectively the same as a Synchronise operation.

5 - Synchronise

The Synchronise option sends a message to the fingerprint sharing server which requests that all details are re-sent.

If the terminal is connected to this template sharing application then all information pertaining to this terminal will be deleted (excluding database credentials). When the terminal next communicates with this application then all credentials are re-sent to this terminal.

6 - Detail

This was introduced in later versions of firmware to allow the user to see information relating to the enrolment requirements. The detail is as follows:

Minimum enrol score - 80% by default.

This indicates the minimum level that is required for a successful enrolment and can only be changed in the server software.

Finger mode - Single mode by default.

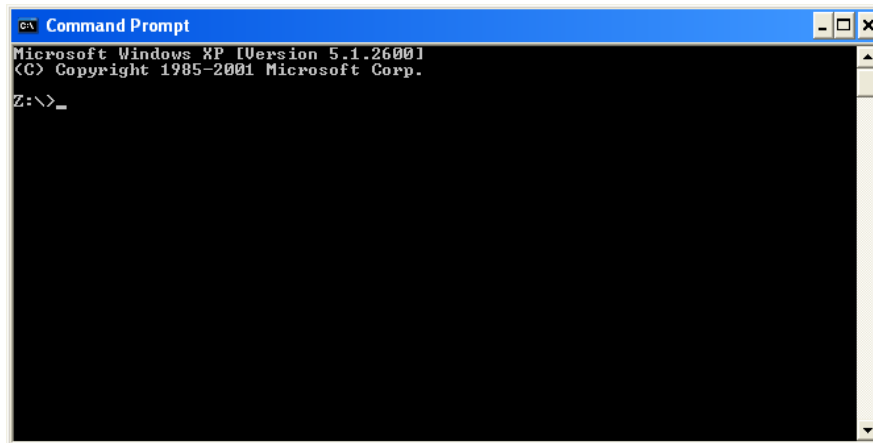
This indicates what enrolment mode the terminal is in. When in dual mode the terminal will allow enrolment of 1 or 2 fingers per identity.

Appendix

Determine Adaptor address

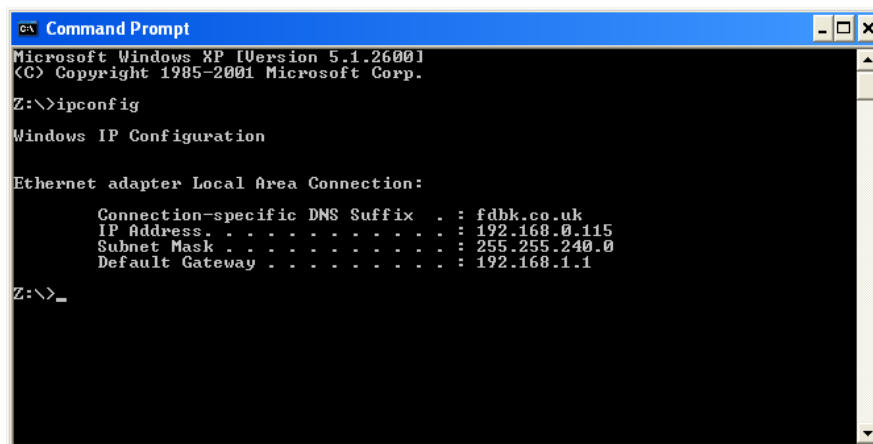
One method to determine the network adaptor address is as follows:

- 1) Open a command prompt dialogue box



```
Command Prompt
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.
Z:\>_
```

- 2) Type “ipconfig” and press enter



```
Command Prompt
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.
Z:\>ipconfig
Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : fdbk.co.uk
    IP Address . . . . . : 192.168.0.115
    Subnet Mask . . . . . : 255.255.240.0
    Default Gateway . . . . . : 192.168.1.1
Z:\>_
```

- 3) In this case there is only one Ethernet adapter but the IP address shown above is the “Adaptor address”.