# Fingerex for Windows 3.8 Installation & Configuration Guide

Documentation for Fingerex for Windows 3.8

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## **Table of Contents**

BEFORE BEGINING	;
System Requirement	3
NETWORK CONSIDERATION	3
SERVER INSTALLATION	;
INSTALL ON SINGLE SERVER	5
SERVER CONFIGURATION	)
START & STOP SERVICE	)
CLIENT INSTALLATION12	2
DEVICE DRIVER INSTALLATION	<u>)</u>
THREE TYPES OF INSTALLATION	ł
SANITY CHECK	7

# **Before Begining**

## **System Requirement**

Fingerex requires following environment for server installation.

For server;

O/S:	Microsoft Windows 2000 Server or above
CPU:	Pentium4 1GHz or above
Memory:	1GB or above
HDD:	10GB
Application:	Microsoft IIS 5.0 or above
Database:	RDBMS with ADO support
	(Example: Microsoft SQL server, Oracle,
	Microsoft Accessetc.)

For client;

O/S:	Microsoft Windows XP or newer
CPU:	Pentium4 1GHz or above
Memory:	Minimum requirement of O/S
HDD:	20MB
Application:	Microsoft IE 5.0 or above
	(For web application logon)

## **Network Consideration**

Fingerex requires certain network implementation. In a nutshell, Fingerex server should be able to communicate with

client and database system. Since Fingerex server does not communicate with legacy application system directly, no network connection between two system. This gives more secure networking design possibilities.



Fig 1 Typical Network Configuration

# Server Installation

## Install on Single Server

When you start installation, following dialog will appear.



After reading software license agreement, click "Yes"

InstallShield Wizard 🔀
License Agreement Please read the following license agreement carefully.
Press the PAGE DOWN key to see the rest of the agreement.
Fingerex Server Contract for Use of Software Please read carefully following important contractual terms and conditions. This is a legal contract for the permission to use between Digent and Purchaser but not a contract for purchase or sales. [Purchaser] in this contract refers to as a person or company or organization purchasing this software product by paying for the product. In case that Purchaser uses this software product, it is considered that Purchaser agrees all terms and conditions in this contract. [Use] in this contract refers to as the circumstances that this
Do you accept all the terms of the preceding License Agreement? If you choose No, the setup will close. To install Fingerex, you must accept this agreement.
InstallShield Kack Yes No.

# Fingerex is being installed

InstallShield Wizard	
Setup Status	
Fingerex Setup is performin	the requested operations.
Installing:	
C:\\Fingerex\InstallPack	ges\Client Files\FingerAPI22.dll
	29%
InstallShield	
	[Cancel]

## After installation, you need reboot system.

InstallShield Wizard				
	InstallShield Wizard Complete The InstallShield Wizard has successfully installed Fingerex. Before you can use the program, you must restart your computer. Yes, I want to restart my computer now No, I will restart my computer later. Remove any disks from their drives, and then click Finish to complete setup.			
	< <u>B</u> ack <b>Finish</b> Cancel			

After installation, you should be able to see following menu.



If you click "Fingerex Files", you should see following contents.



DBSample Contains sample database files. - dbFingerex.mdb - TableScript.sql

Drivers	Contains FD/FM fingerprint scan device driver
InstallPackages	Contains three different packaged client application and fingerprint scan device driver auto installer.
	- Client Files : File for include into your install package
	- Normal : Self installation package
	- WEB : For embedding inside web pages
Manual	Contains all manual for Fingerex
SDK Samples	Contains two samples.
	- Microsoft .NET Sample (for Microsoft visual studio 2005 or new)
	- WEB Sample

# Server Configuration

Following picture shows Fingerex Manager, a configuration tool.

ingerex Mana	ger	DIĞENT
Configuration User Manage	Logs	
Property Name	Current Value	Description
Server IP Server Port Log Path Auth Level Connection Timeout MAX Fingerprint per user OTP Size DB Connection String Socket IO Threads Simultaneous Connections	1975 D: \\WINDOWS\\system32\\FXLogs 2 60000 10 20 Provider=Microsoft.Jet.OLEDB.4.0;Data Sourc 4 100	Set Server's bind IP address or Set Server's communication por Set File Path of Server Log. Set Algorithm's level for auther Set timeout value for idle conne Set Maximum registration finge Set OT key size. You must set Set Database connection string Set count of socket IO Thread. Set count of Simultaneous con
Change Value		Apply Cancel

You can find general description on right side of panel.

Server IP IP address of Fingerex server. If registered, Fingerex will only accept registered IP for connection. For example, if this IP has value of 127.0.0.1, only local connection is allowed. If server has multiple IP address and wants to accept

	with specific IP, write down in this field. Initial value is blank-which mean accepting all connections.
Server Port	TCP port for Fingerex service.
	Default is 1975.
Log Path	Location of Fingerex operation log.
	Default is Windows\System32\FXLogs
Auth Level	Strength of fingerprint authentication level. For current version, there are 3 options;
	<ul><li>2 High Secure</li><li>1 Medium Secure</li><li>0 Lower Secure</li></ul>
Connection timeout	Timeout value for forced client hang-up by server. In milliseconds.
Max fingerprint per user	Maximum numbers of fingerprint per user on database
OTP Size	Length of onetime password for session identification. Default is 20.
DB Connection String	Database connection string. ADO connection needed.

Socket	ΙΟ	Number	of	thread	for	communic	ation
Threads		handling.					
		-					
Simultaneous		Number	of	maximu	ım	concurrent	user
Connections		connectio	on to	Fingere	x se	rver.	

Following picture shows user list of Fingerex server.

	🗷 Fingerex Manager 📃 🗖 🔀				
ŀ	ing	(ere)	( Mana	ager	DI <u>G</u> ENT
	Config	guration	User Manag	Logs	
	Total l	Jser Num	ber:	Load	Add User Delete
	NO	ID	Name	SessionKey	Num of Fingerprints
	3 4 5	james steven richard	James Steven Richard	C379854AF5F424797D5C2BEBCFA8C0PC6BA78885 9FC7A3C43599BA1E8CA0B924B1CD9F6A37753E0A A43E9AFAB5665B501F17B3449219DE71439BE019	
	Abo	ut			Close

Please note that SessionKey is not a permanent value but changing every fingerprint authentication. It is session based value.

Following picture shows log-managing panel. If you doubleclick on entry, a notepad will open with corresponding log.

Fingerex Manager		
Fingerex Mana	ger	DI <u>G</u> ENT
Configuration User Manage	Logs	
File Name	Path	
2007-11-12.log 2007-11-13.log 2007-11-14.log	D:\WWINDOW5\Wsystem32\WFXLogs D:\WWINDOW5\Wsystem32\WFXLogs D:\WWINDOW5\Wsystem32\WFXLogs	
View		Delete
About		Close

#### Start & Stop Service

You can start & stop Fingerex service with Windows service called "Fingerex V38 NT Service".

**Client Installation** 

#### **Device Driver Installation**

Client PC needs to install device driver for FD or FM

fingerprint reader. When you executing device driver install program, following dialog will be display.



After click "Install" Button, following screen will display.

	B DGENT Device	on 🔀			
			DIGENT		
Digent Device Driver Installer					
If DIGENT hardware is connected, disconnect DIGENT fingerprint reader and then click [OK] button.					
ОК					
	Build:	3790			
	Additional Info:	Service Pack 2			
			Install Cancel	له	



Be sure disconnecting FD or FM before clicking "OK"

Device driver installation is successful.

#### **Three Types of Installation**

There are three ways to install client module of Fingerex on individual PC;

• Web .CAB installation

Web installation happens automatically when a client first opens logon page. No additional installation required.

• Individual install program comes from Digent

There are client install package on Fingerex client CD. You can distribute among client to install. • Module for integrating into your install program

You can locate Fingerex client module on CD. You can include this module inside your install package for singular installation of all application for client PC.

Following is step by step procedure for individual install program from Digent.

Installation package can be found at C:\Program Files\Digent\Fingerex\InstallPackages\Normal\FXClientComp onent.exe



Installshield is preparing install.



## Click "Next" to start installation.

InstallShield Wizard	X			
Setup Status				
Fingerex Client Components Setup is performing the requested operations.				
Installing:				
C:\\DIGENT\Fingerex Client Components\FMFDHWInstaller.exe				
63%				
InstallShield				
	[ Cancel ]			

# Installation in progress.



Reboot after installation.

# Sanity Check

To ensure its installation, you can check functionality with simple web based check.

You can find web pages on installed files.