# BaroPAM Guide(Windows)

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## 1. Install BaroPAM

## 1.1 Preparation before installing BaroPAM

To use **BaroPAM**, you must set a password for your Windows user account or temporarily disable the password (reset the password after installing **BaroPAM**).

Make sure that your Windows user account and password are correct, and that you have the latest updates for Windows.

To install **BaroPAM**, you need to know "Version of Windows, system type, computer name". To do so, "Explorer -> This PC -> Right-click" and the following screen appears.



If you click "**Properties(R)**" on the screen above, a screen that provides system information such as "**Windows version, system type, workgroup, computer name**" appears.



#### BaroPAM



Important) In order to prevent malfunction of **BaroPAM**, "**Computer name**" or "**PC name**" must be "**used in combination of English letters, hyphens, and numbers**" after checking whether Korean characters are included.

Check the "Version of Windows, system type, work group, computer name" on the screen above, and download the appropriate BaroPAM installation module.

The URL to download the **BaroPAM** installation module is as follows.

http://nuriapp.com/download/baropam\_setup\_x32.zip => Windows 7, 8, 10, 11 32bit http://nuriapp.com/download/baropam\_setup\_x64.zip => Windows 7, 8, 10, 11 64bit

## 1.2 Install BaroPAM

Move to the directory where you downloaded the **BaroPAM** installation module and proceed with the installation of **BaroPAM** in the following order.

First, if you unzip the compressed **BaroPAM** installation file (baropam\_setup\_x64.zip), the following "**baropam\_setup\_x64**" directory is created, and the following files exist.



#### BaroPAM

baropam_setup_x64			- 🗆 X
④ New ~	0 6 9 0	↑ Sort - 🛛 🔤 View -	
< → < ↑ 🛅	« D > baro ~ C	, P Search baropam_setup_x64	
🖕 Quick access	Name	Date modified	Type Si
	BaroPAM.bmp	7/27/2023 2:40 PM	8MP File
<ul> <li>OneDrive</li> </ul>	BaroPAM_Guide_Windows_cn.pdf	7/27/2023 2:40 PM	Microsoft Edge P
This PC	BaroPAM_Guide_Windows_en.pdf	7/27/2023 2:40 PM	Microsoft Edge P
Desktop	BaroPAM_Guide_Windows_jp.pdf	7/27/2023 2:40 PM	Microsoft Edge P
Documents	BaroPAM_Guide_Windows_kr.pdf	7/27/2023 2:40 PM	Microsoft Edge P
L Downloads	📥 baropam_setup_x64_cn.exe	7/27/2023 2:41 PM	Application
Uownloads	baropam_setup_x64_en.exe	7/29/2023 6:46 PM	Application
Music	🖞 baropam_setup_x64_jp.exe	7/27/2023 2:40 PM	Application
Pictures	baropam_setup_x64_kr.exe	7/27/2023 2:40 PM	Application
Videos	🔄 gpedit.bat	7/27/2023 2:40 PM	Windows Batch File
Local Disk (C:)	Intpclient_setup.bat	7/27/2023 2:40 PM	Windows Batch File
DVD Drive (D:) CCC	pam_baro_update.ini	7/27/2023 2:40 PM	Configuration sett
	register_x64.reg	7/29/2023 6:59 PM	<b>Registration Entries</b>
DVD Drive (D:) CCCC	Unregister_x64.reg	7/27/2023 2:40 PM	<b>Registration Entries</b>
🔁 Network	yulkan-1.dll	7/27/2023 2:40 PM	Application exten
15 items 1 item selected			
BaroPAM logo image(s BaroPAM User Guide(Ch	ize 354 X 354): BaroPAM.bmp ninese): BaroPAM_Guide_Windows	_cn.pdf	
BaroPAM User Guide(Er	nglish): BaroPAM_Guide_Windows	en.pdf	
BaroPAM User Guide(Ja	apanese): BaroPAM_Guide_Window	IS_Jp.pdf	
BaroPAM User Guide(Ko	prean): BaroPAM_Guide_Windows_	kr.pdf	
Baropam Installer(Ch	Inese): baropam_setup_x64_cn.e	xe	
Baropam Installer(Eng	glish): baropam_setup_x64_en.e	xe	
BaroPAW Installer(Jap	Dariese) baropam_setup_x64_jp.	exe	
Darorawi installer (Kol	tean) Daropan_setup_xo4_Kr.ex	е	
race recognition cont	liguration tile: KF3_AP1.IN1	t bot	
LUCAI GROUP POILCY EC	ntrolient estur het/time wird	L.Udl	
NIP ULIENT SETTINGS:	nipciient_setup.bat(time.wind	(bttp://purienp.com/um.det	ic cot)
upuate UKL contigurat	LION THE pam_paro_update.ini	( <u>niip.//nuriapp.com/updat</u>	<u>e</u> is set)
negistry registration	i iiie. register_x64.reg		

- Registry removal file: Unregister\_x64.reg

Second, To run the **BaroPAM** installation file, if you select the "**baropam\_setup\_x64\_en.exe**" file and click the right mouse button, the screen to install **BaroPAM** does not appear and the "**Windows PC protection**" screen may appear as follows.





Clicking the "Do Not Run" button cancels the installation of BaroPAM.

After confirming the contents of the screen above, click "Additional Information" and the following screen will appear.



If you click the "**Do run**" button, the screen to install **BaroPAM** appears, and if you click the "**Do not run**" button, the installation of **BaroPAM** is canceled.



Third, if you click the "**Do run**" button, the screen to select the installation mode of **BaroPAM** appears. Select "Install for all users (recommended)" if you are installing for the first time or you are an administrator, and "Install for me only" if you need to configure the **BaroPAM** environment for each user after installing the administrator version.

Select S	Setup Install Mode	×
	Select install mode BaroPAM can be installed for all users administrative privileges), or for you o	(requires
	🗣 Install for all users (recor	mmadager
	ightarrow Install for me only	User
		Cancel

Fourth, if you want to create an additional shortcut on the desktop as an additional action to be performed in the settings during **BaroPAM** installation, select an additional action and click the "**Next**" button.

#### BaroPAM



Fifth, after checking the directory and shortcut folder to install **BaroPAM** on the computer, click the "**Next**" button. The progress of **BaroPAM** installation on the computer appears as follows.



#### BaroPAM

Setup - BaroPAM Manager - v1.0.20	– 🗆 X
Installing	FR
Please wait while Setup installs BaroPAM on your computer.	(IO)
Extracting files C:₩Program Files (x86)₩BaroPAM₩BaroBLEManager₩Qt6Network.dll	
	Cancel

Sixth, if the **BaroPAM** module installation is normally completed, the "**Completing the BaroPAM Setup Wizard**" screen appears as follows.



#### BaroPAM



In the screen above, select "Microsoft Runtime Library" to install the package (vcredist) for the Windows process and "Launch BaroPAM Manager" to set the environment for BaroPAM, then click the "Finish" button at the bottom.

## 1.3 Install vcredist

First. When trying to run Microsoft Visual C++ down-configured programs in Windows 32bit and Windows 64bit environments, the necessary vcredist programs appear as follows: "Microsoft Visual C++ 2015-2019 Redistributable (x64) - ..." installation screen.





If it is already installed, the following "Microsoft Visual C++ 2015-2019 Redistributable (x64) - ..." installation modification screen appears.



In this case, since it is already installed, do not click the "**Repair(R) or Uninstall(U)**" button, but click the "**Close(C)**" button.

C++ programs developed with versions after Visual Studio 2005 must have Redistributable installed. If not installed, the following error message occurs when logging on to Windows, and BaroPAM is not applied.



BARO-PAM	-026 BaroPAM
8	The program can't start because MSVCP120.dll is missing from your computer. Please reinstall the program to solve this problem.
	OK

Second, on the "Microsoft Visual C++ 2015-2019 Redistributable (x64) - …" installation screen, after checking the "MICROSOFT Software License Terms", select "Agree(A)" and click the "Install(I)" button to see the following The same "Installation Progress" screen appears.

N	Microsoft Visual C++ 2015-2019 Redistributable (x64) - 14.27.29016
Instal	ation progress
Progress:	Microsoft Visual C++ 2019 X64 Minimum Runtime - 14.27.29016

Thirdly, when the installation of "Microsoft Visual C++ 2015-2019 Redistributable (x64) - ..." is completed normally, the following "Setup Successful" screen appears.





After proceeding with the vcredist program installation, call "Launch BaroPAM Manager" to set the BaroPAM environment.

### 1.4 BaroPAM environment settings

If the **BaroPAM** module is installed normally, proceed with the **BaroPAM** environment setting in the following order to use **BaroPAM**.

First, the "BaroPAM Manager" screen appears, where you can configure BaroPAM for Windows.

ecure key:	jIqIcHbVqdpj7b4PzBpM2DiIeBvmHFV/
/de time(3~60 sec):	30
mergency One-time Authentication K	ey Additional Function
1 42	Server Name WIN11ENG
11111111	Username WORKGROUP₩dhs
<b>3</b> <b>4444444444444</b>	Applying BLE     Auto Login     Screen Saver     Biometric Interconnection
( che	
Citi	Save

Secure key



The secure key assigned to each information asset is a required input item, and you must enter the secure key granted upon request from the vendor.

If you enter an arbitrary "Secure key" not given by the vendor, you may be unable to log on to the information asset because an incorrect OTA key is given.

If the secure key set in the information asset and the secure key registered in the **BaroPAM** app, which is a **OTA key** generator, are different, the **OTA key** is different, so you may not be able to log on to Windows.

If you do not enter the secure key or it is out of range, the following message appears on the screen.

BaroPAM Manag	jer X
Please check the	secure key.
	ОК

#### ■Cycle time(3~60 sec)

The Cycle time of the **OTA key** is a required input item and can be specified from a minimum of 3 seconds to a maximum of 60 seconds. If you do not enter the Cycle time or it is out of range, the following message appears on the screen.

BaroPAM Manager	×
Please enter an integer betw	veen 3 and 60.
	ОК

If the cycle time of the OTA key and the cycle time of the OTA key specified in the BaroPAM app, which is a OTA key generator, are different, it may be impossible to log in because the OTA keys are different.

#### ■Emergency OTA key

The emergency OTA key can be set up to 5 8-digit numbers in case the OTA key generator **BaroPAM** app is unavailable or lost, and the emergency OTA key used when logging on to Windows is automatically deleted.

① Enter the emergency OTA key to be added as an 8-digit number.
 ② Click the "Add" button to add the emergency OTA key entered in ① to ③. If you want to delete



the added emergency OTA key, double-click the emergency OTA key in 3 and it will be deleted in 3.

If you add more than 5 emergency OTA keys, the following message appears on the screen.



#### ■Server name

You must enter the same computer name as the "**server name**" registered in the **BaroPAM** app, a **OTA** key generator.

If BLE(Bluetooth Low Energy) is used, if the set server name and the server name registered in the **BaroPAM** app, which is a **OTA key** generator, are different, automatic logon of Windows and screen saver lock prevention/automatic lock/automatic unlock The function does not work normally

#### User name

Specifies the Username used to log on to Windows.

When using "Local user", "WorkgroupWUsername", when using "Microsoft Account", "MicrosoftAccountWMS Registration Account", and when using "Windows server", "Domain Name" must be specified to log on to Windows.

In the case of a local user, if the work group is "WORKGROUP" and the user name is "baropam", "WORKGROUPWbaropam", in the case of a Microsoft account, if the MS registration account is "mc529@nurit.co.kr", "MicrosoftAccountWmc529@nurit.co kr", if the domain name is "nurit.co.kr" for Windows server, enter "nurit.co.kr".

Note) To check the workgroup, right-click the "Windows Start" image -> click "System" -> click "Advanced system settings" -> check "Workgroup" on the "System Properties" screen.



#### BaroPAM

			No. of the states of the state
A =	System > About		Conjuster Name Handware Advanced System Protection Remote
Red a setting	Win Tilling Antonical 1	Rename this PC	Windows uses the following information to identify your computer on the network.
· hoten	Device specifications	248 .	Computer description:
Sustant & secon     Notion & Secon     Notion & Secon     Notion & Secon     Account     Account     Account     Secon     Georg      Account	Beitzenstere Windfrag Pracesser voreigt (Conflict, P. Hann (Poling Statistics, solid Conflict, P. Hann (Poling Statistics, solid Conflict), Physical Conflict, Physic		For example: "Kitchen Computer" or "Mary's Computer": Full computer manie: Whi 11 Eng Workgroup: WORKGROUP To use a wisard to join a domain or workgroup, click. Network ID Network ID To remaine this computer or change its domain or Ohange
<ul> <li>Annual Annual Annual</li></ul>	Wellines specification     Kitteen     Kitteen     Kitteen     Second Data     Second Research Second Research Park     Versell     Second Research     Versell     Verse	5.00 C	OK Carcel Apply

Note) Check Username, which is the Windows user account, in "Search Windows -> Enter 'netplwiz' -> Open".

User Accounts	×	Win11Eng\dbs P	operties	×
Users Advanced		General Group	Menbenhip	
Use the list below to grant or deny users access to your computer, and to change passwords and other settings.		User name:	dhs	
Users for this computer:		Full name:	dhs	
User Name. Group  Contract of the Administration  Add Eamour Properties  Passweed for dhs		Description:		
Password. Reset Parsword.				

#### ■Applying BLE

In order to minimize user's inconvenience, select "**Applying BLE**" when using the automatic log-in of the computer with a single touch in conjunction with the **BaroPAM** app and the function of preventing/auto-locking/auto-unlocking the screen saver.

If "Auto Login" is selected, it works with the BaroPAM app to automatically log in to the computer with a single touch and to prevent/auto-lock/auto-unlock the screen saver.

If you select "Screen Saver", you can use the function to prevent/auto-lock/auto-disable the computer's screen saver with a single touch in conjunction with the BaroPAM app.

#### ■Biometric Interconection

In order to minimize user's inconvenience, when using the automatic logon function of Windows by



face recognition using the computer's camera, after selecting "**Biometric Interconnection**", facial feature information is extracted and registered in the following order.



Second, if you click the "**Save**" button to save the **BaroPAM** environment setting information, the following message appears.



If you select the "Yes" button, the settings in the "BaroPAM Manager" screen are saved, the "BaroPAM Manager" screen is closed, and the BaroPAM installation process proceeds.

If the "No" button is selected, the settings made on the "BaroPAM Manager" screen are not saved, the "BaroPAM Manager" screen is closed, and the BaroPAM installation process ends.

Third. If you click the "Yes" button on the above screen, the following "Registry Editor" screen appears to register BaroPAM in the Windows registry.

Registr	y Editor
1	Adding information can unintentionally change or delete values and cause components to stop working correctly. If you do not trust the source of this information in C:\Program Files (x86)\BaroPAM\register_x64.reg, do not add it to the registry. Are you sure you want to continue?
	Yes No

Fourth, after checking the contents of the "**Registry Editor**" screen, click the "**Yes**" button to register the **BaroPAM** registry, and the following "**Registry Editor**" screen appears.



#### BaroPAM



Click the "OK" button on the screen above to complete BaroPAM's registry registration.

Fifth, after copying the module to the **BaroPAM** installation directory, the following message appears.

BaroPAM Manager	×
Config information is saved.	
ОК	

Click the "OK" button on the screen above to complete the installation of BaroPAM.

Note) After installing **BaroPAM**, do not reboot Windows, but use "Winkey+L" to test.

The details and format of the authentication log (pam\_baro\_auth.log) logged during Windows logon are as follows.

1) Logon success
① Using an emergency OTA key
2018.10.14 11:46:02-0537 : BAROPAM-PC : emergency authentication key : session opened for
user root by (local ip=1.234.83.169,Remote ip=0.0.0.0)
2018.10.14 11:46:02-0537 : BAROPAM-PC : BaroPAM Setup : emergency authentication key :
session opened for user root by (local ip=1.234.83.169,Remote ip=0.0.0.0)
② Use a OTA key
2018.10.14 11:46:02-0537 : BAROPAM-PC : authentication key : session opened for user root by
(local ip=1.234.83.169,Remote ip=0.0.0.0)
2018.10.14 11:46:02-0537 : BAROPAM-PC : BaroPAM Setup : authentication key : session opened
for user root by (local ip=1.234.83.169,Remote ip=0.0.0.0)
③ Using BaroBLE
2018.10.14 11:46:02-0537 : BAROPAM-PC : BaroBLE Logon : authentication key : session opened
for user root by (local ip=1.234.83.169,Remote ip=0.0.0.0)
2018.10.14 11:46:02-0537 : BAROPAM-PC : BaroBLE Manager : BLE session opened for user root
by (local ip=1.234.83.169,Remote ip=0.0.0.0)
2018.10.14 11:46:02-0537 : BAROPAM-PC : BaroBLE Manager : ERP Application auto-login for
user root by (local ip=1.234.83.169,Remote ip=0.0.0.0)
④ Use biometric authentication
2018.10.14 11:46:02-0537 : BAROPAM-PC : biometrics authentication : User root facial
recognition Success (local ip=1.234.83.169,Remote ip=0.0.0.0)



#### BaroPAM

2018.10.14 11:46:02-0537 : BAROPAM-PC : BaroPAM Setup : User root facial recognition Success (local ip=1.234.83.169,Remote ip=0.0.0.0) 2) Logon failure (1) Verification failed 2018.10.14 11:46:02-0537 : BAROPAM-PC : emergency authentication key : User root authentication failed (local ip=1.234.83.169, Remote ip=0.0.0.0) 2018.10.14 11:46:02-0537 : BAROPAM-PC : authentication key : User root authentication failed (local ip=1.234.83.169,Remote ip=0.0.0.0) 2018.10.14 11:46:02-0537 : BAROPAM-PC : BaroPAM Setup : User root authentication failed (local ip=1.234.83.169, Remote ip=0.0.0.0) 2018.10.14 11:46:02-0537 : BAROPAM-PC : BaroBLE Manager : User root authentication failed (local ip=1.234.83.169,Remote ip=0.0.0.0) 2018.10.14 11:46:02-0537 : BAR0PAM-PC : BaroBLE Logon : User root authentication failed (local ip=1.234.83.169.Remote ip=0.0.0.0) 2018.10.14 11:46:02-0537 : BAROPAM-PC : biometrics authentication : User root facial recognition failed (local ip=1.234.83.169, Remote ip=0.0.0.0) 2018.10.14 11:46:02-0537 : BAROPAM-PC : BaroPAM Setup : User root facial recognition failed (local ip=1.234.83.169,Remote ip=0.0.0.0) 2 There is no authentication key cycle time 2018.10.14 11:46:02-0537 : BAROPAM-PC : authentication key : There is no cycle time for user root (local ip=1.234.83.169, Remote ip=0.0.0.0) 2018.10.14 11:46:02-0537 : BAROPAM-PC : BaroPAM Setup : There is no cycle time for user root (local ip=1.234.83.169,Remote ip=0.0.0.0) 2018.10.14 11:46:02-0537 : BAROPAM-PC : BaroBLE Manager : There is no cycle time for user root (local ip=1.234.83.169, Remote ip=0.0.0.0) 2018.10.14 11:46:02-0537 : BAROPAM-PC : BaroBLE Logon : There is no cycle time for user root (local ip=1.234.83.169,Remote ip=0.0.0.0) ③ No verification code entered 2018.10.14 11:46:02-0537 : BAROPAM-PC : authentication key : There is no verification code for user root (local ip=1.234.83.169, Remote ip=0.0.0.0) 2018.10.14 11:46:02-0537 : BAROPAM-PC : BaroPAM Setup : There is no verification code for user root (local ip=1.234.83.169, Remote ip=0.0.0.0) 2018.10.14 11:46:02-0537 : BAROPAM-PC : BaroBLE Manager : There is no verification code for user root (local ip=1.234.83.169, Remote ip=0.0.0.0) 2018.10.14 11:46:02-0537 : BAROPAM-PC : BaroBLE Logon : There is no verification code for user root (local ip=1.234.83.169, Remote ip=0.0.0.0) 4 No verification key 2018.10.14 11:46:02-0537 : BAROPAM-PC : authentication key : There is no secure key for user root (local ip=1.234.83.169, Remote ip=0.0.0.0) 2018.10.14 11:46:02-0537 : BAROPAM-PC : BaroPAM Setup : There is no secure key for user root (local ip=1.234.83.169,Remote ip=0.0.0.0) 2018.10.14 11:46:02-0537 : BAROPAM-PC : BaroBLE Manager : There is no secure key for user root (local ip=1.234.83.169, Remote ip=0.0.0.0) 2018.10.14 11:46:02-0537 : BAROPAM-PC : BaroBLE Logon : There is no secure key for user root (local ip=1.234.83.169,Remote ip=0.0.0.0) 3) Etc 1 BLE session closed 2018.10.14 11:46:02-0537 : BAROPAM-PC : BaroBLE Manager : BLE session closed for user root



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(local ip=1.234.83.169,Remote ip=0.0.0.0)

If the Windows time is different from the current time, the OTA key does not match because the OTA key does not match.

Recently, as a method of time synchronization (time server time synchronization) for servers/network equipment, the system time can be set to the current time in the administrator account using NTP (Network Time Protocol).

If you cannot log on to Windows, boot into safe mode as follows, move to the installation module directory, and click the "Unregister\_x64.reg" file to release the BaroPAM information added to the Windows registry.

Windows safe mode, which is used when unable to log on to Windows, is a mode for diagnosing the operating system and has many functional limitations, such as using the minimum number of files and drivers. But thanks to this, it can help to solve the problem. (Refer to the Windows manual)



## 2. BaroPAM application

## 2.1 BaroPAM application process



## 2.2 BaroPAM application screen



## 2.3 How to logon to Windows

If Windows is currently logged on, press "Winkey+L" or turn on Windows to display the BaroPAM logon screen where you enter the following BaroPAM OTA key and Windows Username/Password.

When using "Local user", "WorkgroupWUsername", when using "Microsoft Account", "MicrosoftAccountWMS Registration Account", and when using "Windows server", "Domain Name" must be specified to log on to Windows.

In the case of a local user, if the work group is "WORKGROUP" and the user name is "baropam", "WORKGROUPWbaropam", in the case of a Microsoft account, if the MS registration account is "mc529@nurit.co.kr", "MicrosoftAccountWmc529@nurit.co kr", if the domain name is "nurit.co.kr" for Windows server, enter "nurit.co.kr".

The "server name, secure key, cycle time" entered on the "BaroPAM Manager" screen must be entered identically on the "Register server information" screen of the "BaroPAM" app.

#### **BaroPAM**



Download the **BaroPAM** App)



**BaroPAM** app can be used on Android 6.0 (Marshmalliw) API 23, iOS 13.0 or higher, and does not support landscape mode.

After installing the **BaroPAM** app, launch the **BaroPAM** app, click the "Verification Code" button on the menu selection screen, and enter the "Server name, Secure Key, Cycle time" entered in the



"BaroPAM Manager" screen into the "Register server information" of the BaroPAM App. You must enter the same on the screen.

## Message: The "OTA key" is incorrect because the date and time of the Android phone or iPhone are different from the current time.

Cause: This is caused by not using the time provided by the network for the Android or iPhone's date and time.

Action: For Android phones, go to "Settings" -> "General management" -> "Date and time" -> "Automatic date and time" and "Automatic time zone" -> "Allow" For iPhone, go to "Settings" -> "Date & Time" -> "Set Automatically" -> "Allow"

**Message:** If you cannot log in because the one-time authentication key does not match. Cause: BaroPAM is a time synchronization method, so the phone and Windows time must be the same. Action: Make sure the time on your phone and Windows are correct.

Enter the Windows user account (Username), generate a OTA key in the "BaroPAM" app on the smartphone, enter the OTA key generated in "Verification code" and "Password" in Windows, then click "->" Alternatively, clicking the "Enter" button requests authentication to the BaroPAM module, and if verification is successful, the logon authentication policy of the Windows OS is activated.

Ex) If biometric authentication is not used



Ex) When using biometric authentication





If it is confirmed by comparing it with the already registered face feature information, it logs on to Windows.

If face recognition fails or if you press the "**Esc**" key to cancel face recognition, the following Windows logon screen appears.





#### BaroPAM

In the screen above, enter the Windows user account (Username) and "**Password**" and click the "->" or "Enter" button to request authentication from Windows. If authentication is successful, log on to Windows.

In Windows, if the **BaroPAM** verification module fails to authenticate the entered **OTA key**, the following "**Error**" message appears on the **BaroPAM** logon screen.



## 2.4 BaroPAM updating

First, click the "**Start**" button at the bottom right of Windows and click "**BaroPAM Manager**" as follows.



#### BaroPAM

=	BaroPAM	^	생산성		
	BaroBLE Manager(for manager)				
	BaroPAM Manager(for manager)		1		
	c		Office	3	
	O Chrome		Unite		
	Chrome 앱	×			<b>*</b>
	O Cortana		Microsoft Edge	사진	
	D		탐색		
	Daum	~			
	G		<b>1</b>	2	
	Git	~	Microsoft Sto	날씨	
æ	💽 Groove 음악				<b>a</b> 😅 🕡
D	INCAInternet	~	Solitaire	휴대폰과 연결	플레이
53	M				
ŝ	MagicLine4NX	~			
~	Malwarebytes		<b>e</b>		
Φ	Microsoft Edge		휴지통		

Second, if you click "BaroPAM Manager", the following "BaroPAM intro" screen appears.



BaroPAM



Thirdly, after the "**BaroPAM intro**" screen lasts for 3 seconds, the "**BaroPAM Certification**" screen that authenticates to change the environment settings of **BaroPAM** for Windows appears as follows.





Enter the OTA key generated by the BaroPAM app in "Verification code:" and click the "Login" button. If the OTA key entered is incorrect, a message box at the bottom displays "Certification failed. Please re-enter your verification code." It is displayed, and the OTA key must be regenerated and entered in the BaroPAM app.



When using biometric authentication, the following biometric authentication screen appears instead of the "BaroPAM Certification" screen.



Fourth, when authentication of the OTA key is completed on the biometric authentication or "BaroPAM Certification" screen, the "BaroPAM Manager" screen appears where you can change the environment settings of BaroPAM for Windows as follows.



Baro	PAM
------	-----

BaroPAM Manager - v1.0.20		
Limit Count(1~10 times):	5	
Limit Time(15~600 sec):	30	
Key method:	app512	~
Cycle time(3~60 sec):	30	
Secure key:	jlqlcHbVqdpj7b4PzBpM2DileBv	mHFV/
Access control list type	O Deny	◯ Allow
Prevent Man-in-the-middle Attack?	O Yes	⊖ No
Emergency One-time Authentication	Key ACL Usernam	e
	Add	Add
11111111 22222222 3333333 44444444 555555555		
Additional Function		
Server WIN11ENG	Username WORK	GROUP₩dhs
Environment Setting Share C	Username Applying BLE O	Auto Login O Screen Saver
Close Help Re	move Log View Copy	Update Save
Convicts ON	wit com All rights researed http://w	

Fifth, if you click the "**Update**" button at the bottom of the "**BaroPAM Manager**" screen, the following message will appear if it is the latest version.

BaroPAM Manager	×
Current BaroPAM is the lat	test version.
	ОК

Sixth, if there are contents to be updated in **BaroPAM**, the update process proceeds as follows.



#### BaroPAM



Seventh, after the update of **BaroPAM** has proceeded normally, in order to apply the update, you need to reboot Windows manually by pressing "**Winkey+L**" or if you need to reboot Windows.



## 3. BaroPAM resetting

### 3.1 BaroPAM environment resettings

If you need to reset the environment after installing **BaroPAM**, reset the **BaroPAM** environment in the following order.

First, click the "**Start**" button at the bottom right of Windows and click "**BaroPAM Manager**" as follows.

=	BaroPAM	^	생산성		
	BaroBLE Manager(for manager)				
	BaroPAM Manager(for manager)				
	c		Office	8	
	O Chrome		Onice		
	Chrome 앱	~			
	O Cortana		Microsoft Edge	사진	
	D		탐색	12	
	Daum	~			
	G		<b>1</b>	<u>~</u>	
	Git Git	~	Microsoft Sto	날씨	
	🗿 Groove 음악				
D	INCAInternet	~	Solitaire	휴대폰과 연결	플레이
53	м				
	MagicLine4NX	~			
ŝ	Malwarehytes		6		
Ф			ATIE		
	Microsoft Edge		유시중		

Second, if you click "BaroPAM Manager", the following "BaroPAM intro" screen appears.



BaroPAM



Thirdly, after the "BaroPAM intro" screen lasts for 3 seconds, the "BaroPAM Certification" screen that authenticates to change the environment settings of **BaroPAM** for Windows appears as follows.





Enter the **OTA key** generated by the **BaroPAM** app in "**Verification code:**" and click the "**Login**" button. If the **OTA key** entered is incorrect, a message box at the bottom displays "**Certification failed. Please re-enter your verification code.**" It is displayed, and the **OTA key** must be regenerated and entered in the **BaroPAM** app.



When using biometric authentication, the following biometric authentication screen appears instead of the "**BaroPAM Certification**" screen.



Fourth, when authentication of the OTA key is completed on the biometric authentication or "BaroPAM Certification" screen, the "BaroPAM Manager" screen appears where you can change the environment settings of BaroPAM for Windows as follows.



#### BaroPAM

Limit Count(1~10 times):	5		
Limit Time(15~600 sec):	30		
Key method:	app512	,	~
Cycle time(3~60 sec):	30		
Secure key:	jlqlcHbVqdpj7b4PzBpM2DileB	vmHFV/	
Access control list type	O Deny	OAllow	
Prevent Man-in-the-middle Attack?	O Yes	⊖ No	
Emergency One-time Authentication	Key ACL Useman	ne	
	A@ (	4	
11111111         22222222         333333333         44444444         555555555		6	
Additional Function			2
Server WIN11ENG	Username WOR	KGROUP₩dhs	
Environment Setting Share ( DB Interconnection Ap HTTP Interconnection	Username Applying BLE	Auto Login O Screen Saver	

#### Image: Limit number(1~10 times)

Set the limited number of times (1~10) for the OTA key. If you do not enter the limit number or it is out of range, the following message appears on the screen.



■Limit time(15~600 sec)



Set the time limit (15~600 sec) for the OTA key. If you do not enter the time limit or go out of range, the following message will appear on the screen.

BaroPAM Manager	×
Please enter an integer between 15 and 600.	
ОК	

The time limit is forcibly closing the logon screen of the remote visitor who tried to log on if the logon fails as many times as the limited number of times during the time limit when attempting to log on to Windows by connecting remotely.

#### ■Key method

The authentication method of the **OTA key** is selected from app1, app256, app384, **app512** when using the **BaroPAM** app, which is a one-time generator.

#### ■Cycle time(3~60 sec)

The authentication cycle time of the **OTA key** is a required input item and can be specified from a minimum of 3 seconds to a maximum of 60 seconds. If you do not enter the authentication cycle time or it is out of range, the following message appears on the screen.

BaroPAM Manager	×	
Please enter an integer bet	ween 3 and 60.	
	ОК	

If the OTA key authentication cycle time and the OTA key generation cycle time specified in the BaroPAM app, which is a OTA key generator, are different, login may not be possible because the OTA keys are different.

#### Secure key

The secure key assigned to each information asset is a required input item, and you must enter the secure key granted upon request from the vendor.

If you enter an arbitrary "Secure key" not given by the vendor, you may be unable to log on to the information asset because an incorrect OTA key is given.



If the secure key set in the information asset and the secure key registered in the **BaroPAM** app, which is a **OTA key** generator, are different, the **OTA key** is different, so you may not be able to log on to Windows.

If you do not enter the secure key or it is out of range, the following message appears on the screen.

BaroPAM Manag	jer X
Please check the	secure key.
	ок

#### ■Access control list

Select whether to allow (Allow) or exclude (Deny) 2nd authentication (additional authentication) during Windows logon.

If "Deny" is selected, only user accounts set in ACL (pam\_baro\_acl.ini) are allowed except for 2nd authentication (additional authentication), and user accounts that are not set are allowed.

When "Allow" is selected, only user accounts set in ACL (pam\_baro\_acl.ini) allow 2nd authentication (additional authentication), and user accounts that are not set are excluded.

#### **Will it prevent main-in-the-middle attacks?**

If "Yes" is selected to prevent a man-in-the-middle attack, other users cannot log on to Windows during the authentication cycle time of the OTA key. If "No" is selected, the OTA key Regardless of the authentication cycle time, all users are allowed to log on to Windows.

#### Emergency OTA key

The **emergency OTA key** can be set up to 5 8-digit numbers in case the **OTA key** generator **BaroPAM** 앱 app is unavailable or lost, and the **emergency OTA key** used when logging on to Windows is automatically deleted.

① Enter the emergency OTA key to be added as an 8-digit number.
 ② Click the "Add" button to add the emergency OTA key entered in ① to ③. If you want to delete the added emergency OTA key, double-click the emergency OTA key in ③ and it will be deleted in ③.

If you add more than 5 emergency OTA keys, the following message appears on the screen.





#### ■ACL Username

Registers a user account that needs to allow (Allow) or exclude (Deny) 2nd authentication (additional authentication) when logging on to Windows.

④ Enter the user account to be added.

⑤ Click the "Add" button to add the user account entered in ④ to ⑥. If you want to delete the added user account, double-click the user account in ⑥ and it will be deleted in ⑥.

#### ■Server name

You must enter the same computer name as the "**server name**" registered in the **BaroPAM** app, a **OTA** key generator.

If BLE(Bluetooth Low Energy) is used, if the set server name and the server name registered in the **BaroPAM** app, which is a **OTA key** generator, are different, automatic logon of Windows and screen saver lock prevention/automatic lock/automatic unlock. The function does not work normally

#### User name

Specifies the Username used to log on to Windows.

When using "Local user", "WorkgroupWUsername", when using "Microsoft Account", "MicrosoftAccountWMS Registration Account", and when using "Windows server", "Domain Name" must be specified to log on to Windows.

In the case of a local user, if the work group is "WORKGROUP" and the user name is "baropam", "WORKGROUPWbaropam", in the case of a Microsoft account, if the MS registration account is "mc529@nurit.co.kr", "MicrosoftAccountWmc529@nurit.co kr", if the domain name is "nurit.co.kr" for Windows server, enter "nurit.co.kr".

Note) To check the workgroup, right-click the "Windows Start" image -> click "System(Y)" -> click "Advanced system settings" -> check "Workgroup" on the "System Properties" screen.

#### BaroPAM

A =	System > About		Conputer Name Handware Advanced System Protection Remote
Industring J Industring J Industring Content Network & Vetwork Network & Vetwork Network & Vetwork Network & Vetwork Apps Apps Apps	Weinfing Values11	Finance His IK	Windows uses the following information to identify your computer on the network.           Computer description:           For example: "Witchen Computer" or "Mary's Computer".           Full computer mane:         Wn11Eng           Workgroup:         WORKGROUP           To use a wisered to join a domain or workgroup. dick         Natwork (D
Ten k inquige     Georg     Georg     Annoldity     Pracy & security     Gifference Update	Notand Sela Distanti in nontgrave General positivities Advanced by Methods Specifications Methods Dist Sectors	ine unitar	To remarke this computer or change its domain or Oxange Ok Obange.

Note) Check Username, which is the Windows user account, in "Search Windows -> Enter 'netplwiz' -> Open".

User Accounts X	Win11Eng\dbs1	Properties	×
Users Advanced	General Group	Membership	
Use the list below to grant or deny users access to your computer, and to change passwords and other settings.	User name:	dhs	7
Users for this computer:	Full name:	dhs	
User Name         Group           Idds         Administrations           Add         Earnaive           Password for dhs         Properties           To change your password, press Ctrl-Alt-Del and select Change         Reserved	Description		
Reset Parovord.			

#### Environment settings

Select whether to share and use **BaroPAM** environment settings without classifying them by user or by user (Username).

If "Share" is selected, BaroPAM's configuration file (pam\_baro\_auth.ini) is shared and used without classifying BaroPAM's environment settings by user.

If "Username" is selected, BaroPAM's environment settings are classified for each user, and the BaroPAM environment configuration file (pam\_baro\_auth.ini) is set for each user and used.

#### ■Applying BLE

In order to minimize user's inconvenience, select "Applying BLE" when using the automatic log-in of the computer with a single touch in conjunction with the BaroPAM app and the function of



preventing/auto-locking/auto-unlocking the screen saver.

If "Auto Login" is selected, it works with the BaroPAM app to automatically log in to the computer with a single touch and to prevent/auto-lock/auto-unlock the screen saver.

If you select "Screen Saver", you can use the function to prevent/auto-lock/auto-disable the computer's screen saver with a single touch in conjunction with the BaroPAM app.

#### ■DB Interconnection

When using user authentication by linking a database when logging on to Windows, click "DB Interconnection" at the bottom to display the following screen for setting information to connection to a database.

Limit	Count(1~10 times):	5	
Limit	Time(15~600 sec):	30	
Keym	nethod:	app512	~
Cycle	time(3~60 sec):	30	
Secu	BaroPAM setup - DB i	nfomation ×	
Acce	DB Type	MySQL(MariaDB)	
Prev	DB Name	nurit	
Em	>> User ID	baropam	
11	>> Password		Ę
22 33 44	User Info SQL		
55	SELECT PHONE_N	O AS PHONE_NO, CYCLE_TIME AS CYCLE_TIME FROM TB_USE	
Add	Cancel	DB Test Save Clear	
En		nare Ousername O Applying BLE O Auto Login O Screan Save	4
	DB Interconnection HTTP Interconnection	Application BLE Interconnection Biometric Interconnection	n >>
с	lose Help	Remove Log View Copy Update Save	6

In the screen above, enter the database name, user ID, password, and user information SQL statement, which are information to be connected to the database, and click the "**Save**" button to save.



SELECT <PHONE\_NO> AS PHONE\_NO, <CYCLE\_TIME> AS CYCLE\_TIME FROM <TB\_USER\_INFO> WHERE <USER\_ID> = :USER\_ID

<PHONE\_NO> : Column name with phone number <CYCLE\_TIME> : Column name with OTA key generation cycle time <TB\_USER\_INFO> : table name with login-id <USER\_ID> : The user-ID for which user information is to be queried. It must be the same as the Windows Logon-ID.

No other parts should be modified.

After entering the information to be connected to the database, be sure to click the "**DB Test**" button to test whether the database connection and user information are retrieved.

If the database connection is successful, a message containing the following user information (user-ID, phone number, cycle time) appears.



If the database connection fails, the following message appears, you must check the information to be connected to the database and change the information to be connected.



#### ■Application BLE Interconnection

In order to minimize the user's inconvenience, when using the application's automatic login function with a single touch in conjunction with the BaroPAM app, click "Application BLE Interconnection" at the bottom. Then, a screen for setting information to connected with the following application appears.



#### BaroPAM

	inger three		
Limit Count(	1~10 times):	5	
Limit Time(1	5~600 sec):	30	
Key method:		app512	×
Cycle time(3	~60 sec):	30	
Secure key:		jlqlcHbVqdpj7b4PzBpM2DileBvmHFV/	
Access co	BaroPAM setup - App	lication Infomation X	
Prevent M	System Name	BaeoWEB	
Emerger	User ID	mc529@nurit.co.kr	
111111	Password	Add	=1
222222 333333			
44444 555555	Cancel	Remove Save Clear	
Additional F	unction		
Server	WIN11ENG	Username WORKGROUP₩dhs	_
Environm	ent Setting OShare	OUsername Applying BLE O Auto Login O Screen Sar	/er
	erconnection	Application BLE Interconnection	on
	nterconnection		>>
Ciose	Help	Remove Log View Copy Update Say	e

On the screen above, enter the system name, ID, and password (you do not need to enter it if you are not using it), which are information to be linked to the application.

#### ■Biometric Interconnection

In order to minimize user's inconvenience, when using the automatic logon function of Windows by face recognition using the computer's camera, after selecting "**Biometric Interconnection**", facial feature information is extracted and registered in the following order.



#### ■HTTP Interconnection



The URL to be called (e.g. http://1.23.456.789/baropam/web/result\_curl.jsp) internally includes server name (hostname), user account (username), authentication cycle (cycle\_time), one-time authentication key (auth\_key), etc. The parameters are included and are called when logging in to Windows to perform authentication.

The functions of the buttons at the bottom of the "BaroPAM Manager" screen are as follows.

#### 1. Save button

When the "**Save**" button is clicked, the validity of the input items is first checked and then saved in the **BaroPAM** configuration files (pam\_baro\_auth.ini, pam\_baro\_acl.ini, pam\_baro\_db.ini).

BaroPAM Manager	×
Config information is saved.	
ОК	

Click the "OK" button to close the "BaroPAM Manager" screen.

Note) After resetting the **BaroPAM** environment, do not reboot Windows, but use the shortcut "**Winkey+L**" to test.

#### 2. Update button

When you click the "**Update**" button, if there are contents to be updated in BaroPAM, the update process proceeds as follows. (Refer to "**2.4 BaroPAM updating**")

#### 3. Copy button

If you click the "**Copy**" button, a screen for setting the **BaroPAM** environment setting file (pam\_baro\_auth.ini) for each user is displayed by dividing the environment settings of **BaroPAM** by user. (Refer to "**1.4 BaroPAM environment settings**")



#### BaroPAM

Limit Count(1210 Encode	5	
Limit Count(1 10 times):	-	
Limit Time(15~600 sec):	30	
Key method:	app512	~
Cycle time(3~60 sec):	30	
Secure key:	jlqlcHbVqdpj7b4PzBpM2DileBv	vmHFV/
Access control list type	O Deny	◯ Allow
Prevent Man-in-the-middle Attack?	O Yes	○ No
Emergency One-time Authentication	Key ACL Useman	ne
	Add	Add
11111111 22222222 33333333 44444444 555555555555		
Additional Function		
Server WIN11ENG	Username WORI	KGROUP₩dhs
Environment Setting Share	Username Applying BLE	Auto Login Screen Saver

Note) Username related error message when clicking "Save" button

- 1. If you want to register (save) by entering the same Username as the administrator ID "You cannot save with the administrator's user ID."
- 2. If you do not have a user account in the UsersW directory, but you want to register (save) "There is no registered user account. Please register a user account first in the Windows settings"
- 3. If you misspell your username
   "This is an incorrectly entered 'Username' field. Must be entered as <Group>W<Username>."
- 4. If you have already registered a general user account and are trying to register again "I already have settings in my user account. Saving will delete any existing settings. Do you want to continue?"

5. When registration is complete



BaroPAM

"The setting information has been saved."

#### 4. Log View button

If you click the "Log View" button, a copy of the authentication log logged during Windows logon is displayed on the "Windows Notepad" screen as follows.

	pam_ba	ro_auth_tmp.log	×	+			- 0 ×
File	Edit	View					۲
2023 2023 "dhs 2023 "dhs 2023 2023 "dhs 2023 2023 "dhs 2023 2023 192. 2023 2023 "dhs	.07.31 .07.31 " by ( .07.31 .07.31 " by ( .07.31 .07.31 .07.31 .07.31 168.13 .07.31 .07.31 .07.31 " by (	12:02:43-791 12:02:43-806 local ip = 19: 12:31:15-482 12:31:15-497 local ip = 19: 12:48:00-414 12:48:00-429 local ip = 19: 12:56:40-552 12:56:40-552 12:56:40-557 local ip = 19: 12:57:13-173 12:57:13-173 12:57:13-189 1.130, remote 12:57:48-460 12:57:48-476 local ip = 19:	: WIN11ENG : WIN11ENG 2.168.131.1 : WIN11ENG : WIN11ENG	: BaroPAM : BaroPAM 30, remote : BaroPAM : BaroPAM : BaroPAM 30, remote : BaroPAM 30, remote : Try to : authent : BaroPAM : BaroPAM : BaroPAM 30, remote	<pre>Setup : Try to upd Setup : authentica ip = 0.0.0) Setup : Try to upd Setup : authentica ip = 0.0.0.0) Setup : Try to upd Setup : authentica ip = 0.0.0.0) Setup : Try to upd Setup : authentica ip = 0.0.0.0) update RATE_LIMIT 1 ication key : sessi Setup : Try to upd Setup : Try to upd Setup : authentica ip = 0.0.0.0)</pre>	late RATE_LIMIT line tion key : session of tion key : session of late RATE_LIMIT line tion key : session of late RATE_LIMIT line tion key : session of ine.[5 30 169077583 on opened for user late RATE_LIMIT line tion key : session of	.[5 30 1690772563] opened for user .[5 30 1690774275] opened for user .[5 30 1690775280] opened for user .[5 30 1690775800] opened for user 3] "dhs" by (local ip = .[5 30 1690775868] opened for user
Ln 1,	Col 1				100%	Windows (CRLF)	UTF-8

#### 5. Remove button

When you click the "**Remove**" button, the first step is to remove the information registered in the registry about **BaroPAM** as follows. (Refer to "**3.2 How to Disable BaroPAM**")

#### 6. Help button

Click the "Help" button and the BaroPAM User's Guide for Windows displays the following on the screen.





7. Close button



Click the "Close" button to close the "BaroPAM Manager" screen.

### 3.2 How to disable BaroPAM

If you do not use the **BaroPAM** module while **BaroPAM** is installed, proceed with the removal of **BaroPAM** in the following order.

#### 1. How to use BaroPAM Manager

If you click the "**Remove**" button at the bottom of the "**BaroPAM Manager**" screen, the information registered in the registry about **BaroPAM** is removed as follows.

BaroPAM Manager - V1.0.20		
Limit Count(1~10 times):	5	
Limit Time(15~600 sec):	30	
Key method:	app512	~
Cycle time(3~60 sec):	30	
Secure key:	jlqlcHbVqdpj7b4PzBpM2DileBvr	mHFV/
Access control list type	O Deny	OAllow
Prevent Man-in-the-middle Attack?	O Yes	⊖ No
Emergency One-time Authentication	Key ACL Usernam	e
	Add	Add
11111111 22222222 33333333 44444444 555555555		
Additional Function		
Server WIN11ENG	Username WORK	GROUP₩dhs
Environment Setting Share	Username Applying BLE O	Auto Login O Screen Saver
Close Help Re	move Log View Copy	Update Save
Copyright © N	urit corp. All rights reserved. http://w	ww.nurit.co.kr

First, since you need to allow the registry editor to change the device, click the "Yes" button and the following "Registry Editor" screen appears.





Second, after checking the contents of the "**Registry Editor**" screen, click the "**Yes**" button to remove the **BaroPAM** registry, and the following "**Registry Editor**" screen appears.

🚺 Reg	gistry Editor	×
0	The keys and values contained in C:\Program Files (x86)\BaroPAM\Unregister_x64.reg have been successfully added to the registry.	
	ОК	ן

Click the "OK" button on the screen above to complete BaroPAM's registry removal.

Thirdly, the following message appears after removing the module that exists in the **BaroPAM** installation directory.

BaroPAM Manage	r X
BaroPAM is succes	sfully removed.
	ОК

Click the "OK" button on the screen above to complete the removal of BaroPAM.

#### 2. How to use "Unregister\_x64.reg" file

First, execute the "**Unregister\_x64.reg**" file, which is the following **BaroPAM** removal registry file, in the **BaroPAM** installation module directory.



#### BaroPAM

🕑 New - 🐰		↑↓ Sort ~ 🗮 View ~		
→ • ↑ <sup>1</sup>	« D > baro ~ C	,○ Search baropam_setup_x64		
🐈 Quick access	Name	Date modified	Туре	1
	BaroPAM.bmp	7/27/2023 2:40 PM	BMP File	
<ul> <li>OneDrive</li> </ul>	BaroPAM_Guide_Windows_cn.pdf	7/27/2023 2:40 PM	Microsoft Edge P	
This PC	BaroPAM_Guide_Windows_en.pdf	7/27/2023 2:40 PM	Microsoft Edge P	
Desktop	BaroPAM_Guide_Windows_jp.pdf	7/27/2023 2:40 PM	Microsoft Edge P	
	BaroPAM_Guide_Windows_kr.pdf	7/27/2023 2:40 PM	Microsoft Edge P	
Downloade	baropam_setup_x64_cn.exe	7/27/2023 2:41 PM	Application	
Downideus	📥 baropam_setup_x64_en.exe	7/31/2023 11:55 AM	Application	
1 Music	baropam_setup_x64_jp.exe	7/27/2023 2:40 PM	Application	
Pictures	📥 baropam_setup_x64_kr.exe	7/27/2023 2:40 PM	Application	
Videos	🕞 gpedit.bat	7/27/2023 2:40 PM	Windows Batch File	
Local Disk (C:)	Intpclient_setup.bat	7/27/2023 2:40 PM	Windows Batch File	
M DVD Drive (D:) CCC	pam_baro_update.ini	7/27/2023 2:40 PM	Configuration sett	
	register_x64.reg	7/29/2023 6:59 PM	Registration Entries	
DVD Drive (D:) CCCC	Unregister_x64.reg	7/27/2023 2:40 PM	<b>Registration Entries</b>	
Network	🕒 vulkan-1.dll	7/27/2023 2:40 PM	Application exten	

Unregister\_x64.reg file)

Windows Registry Editor Version 5.00

[-HKEY\_LOCAL\_MACHINEWSOFTWAREWMicrosoftWWindowsWCurrentVersionWAuthenticationWCredential ProvidersW{325D6690-E5AC-4570-B15A-19A622571036}]

[-HKEY\_LOCAL\_MACHINEWSOFTWAREWMicrosoftWWindowsWCurrentVersionWAuthenticationWCredential Provider FiltersW{325D6690-E5AC-4570-B15A-19A622571036}]

[-HKEY\_CLASSES\_R00TWCLSIDW{325D6690-E5AC-4570-B15A-19A622571036}WInprocServer32]

[-HKEY\_CLASSES\_R00TWCLSIDW{325D6690-E5AC-4570-B15A-19A622571036}]

Second, if you run the "Unregister\_x64.reg" file, which is the registry file for removing BaroPAM, the following "User Account Control" screen appears.





Thirdly, since you need to allow the registry editor to change the device, click the "Yes" button and the following "Registry Editor" screen will appear.

Registry	y Editor	
<u>.</u>	Adding information can unintentionally change or dele stop working correctly. If you do not trust the source of (x86)\BaroPAM\Unregister_x64.reg, do not add it to the	ete values and cause components to f this information in C:\Program Files e registry.
	Are you sure you want to continue?	Yes No

Fourth, after checking the contents of the "**Registry Editor**" screen, click the "**Yes**" button to remove the **BaroPAM** registry, and the following "**Registry Editor**" screen appears.

1 Reg	gistry Editor	×
1	The keys and values contained in C:\Program Files (x86)\BaroPAM\Unregister_x64.reg have been successfully added to the registry.	
	ОК	כ

Click the "OK" button on the screen above to complete BaroPAM's registry removal.

Note) After removing **BaroPAM**, do not reboot Windows, but use "Winkey+L" to test.

### 3.3 How to reuse BaroPAM

If the **BaroPAM** module is reused while **BaroPAM** is installed, proceed with the reuse of **BaroPAM** in the following order.

#### 1. How to use BaroPAM Manager

If you click the "**Save**" button at the bottom of the "**BaroPAM Manager**" screen, the first step is to remove the information registered in the **BaroPAM** registry as follows.

parorman manager - v 1.0.20			
Limit Count(1~10 times):	5		
Limit Time(15~600 sec):	30		
Key method:	app512		×
Cycle time(3~60 sec):	30		
Secure key:	jlqlcHbVqdpj7b4PzBpM2Dile8	BvmHFV/	
Access control list type	O Deny	OAllow	
Prevent Man-in-the-middle Attack?	O Yes	⊖ No	
Emergency One-time Authentication	Key ACL Userna	ime	
	Add	Add	
11111111 22222222 33333333 44444444 555555555			
Additional Function			
Server WIN11ENG	Username WOF	RKGROUP₩dhs	
Environment Setting Share C	Username Applying BLE	Auto Login O Screen St	iver tion
Close Help Re	move Log View Co;	py Update Sa	ive

First, if you click the "**Save**" button at the bottom of the "**BaroPAM Manager**" screen, the following "**Registry Editor**" screen appears to register **BaroPAM** in the Windows registry.



BARO-	PAM026	BaroPAM
Registi	try Editor	
1	Adding information can unintentionally change or delete values and ca stop working correctly. If you do not trust the source of this informatio (x86)\BaroPAM\register_x64.reg, do not add it to the registry.	ause components to on in C:\Program Files
	Are you sure you want to continue?	
		Yes No

Second, after checking the contents of the "**Registry Editor**" screen, click the "**Yes**" button to register the **BaroPAM** registry, and the following "**Registry Editor**" screen appears.



If you click the "**OK**" button on the screen above, the following message appears after **BaroPAM**'s registration in the registry is completed.

BaroPAM Manager	×
Config information is saved.	0
ОК	3

Note) After registering the **BaroPAM** registry, do not reboot Windows, but use "Winkey+L" to test.

#### 2. How to use "register\_x64.reg" file

First, execute the "**register\_x64.reg**" file, which is the registry registration file of **BaroPAM**, as follows in the **BaroPAM** installation module directory.



#### BaroPAM

(†) New ·		T↓ Sort ~		
1	« D > baro ~ C	<ul> <li>Search baropam_setup_x64</li> </ul>		
🛨 Quick access	Name	Date modified	Туре	s
0.0	BaroPAM.bmp	7/27/2023 2:40 PM	BMP File	
<ul> <li>OneDrive</li> </ul>	BaroPAM_Guide_Windows_cn.pdf	7/27/2023 2:40 PM	Microsoft Edge P	
This PC	BaroPAM_Guide_Windows_en.pdf	7/27/2023 2:40 PM	Microsoft Edge P	
E Desktop	BaroPAM_Guide_Windows_jp.pdf	7/27/2023 2:40 PM	Microsoft Edge P	
Documents	BaroPAM_Guide_Windows_kr.pdf	7/27/2023 2:40 PM	Microsoft Edge P	
- Downloads	baropam_setup_x64_cn.exe	7/27/2023 2:41 PM	Application	
A Music	baropam_setup_x64_en.exe	7/31/2023 11:55 AM	Application	
e Music	baropam_setup_x64_jp.exe	7/27/2023 2:40 PM	Application	
Pictures	👍 baropam_setup_x64_kr.exe	7/27/2023 2:40 PM	Application	
Videos	🔄 gpedit.bat	7/27/2023 2:40 PM	Windows Batch File	
Local Disk (C:)	stpclient_setup.bat	7/27/2023 2:40 PM	Windows Batch File	
📫 DVD Drive (D:) CCC	pam_baro_update.ini	7/27/2023 2:40 PM	Configuration sett	_
	🐑 register_x64.reg	7/29/2023 6:59 PM	Registration Entries	
DVD Drive (D:) CCCC	Unregister_x64.reg	7/27/2023 2:40 PM	Registration Entries	
an Network	🖲 vulkan-1.dll	7/27/2023 2:40 PM	Application exten	

register\_x64.reg file)

Windows Registry Editor Version 5.00
[HKEY\_LOCAL\_MACHINEWSOFTWAREWMicrosoftWWindowsWCurrentVersionWAuthenticationWCredential
ProvidersW{325D6690-E5AC-4570-B15A-19A622571036}]
@="BaroPAMLogon"
[HKEY\_CLASSES\_ROOTWCLSIDW{325D6690-E5AC-4570-B15A-19A622571036}]
@="BaroPAMLogon"
[HKEY\_CLASSES\_ROOTWCLSIDW{325D6690-E5AC-4570-B15A-19A622571036}WInprocServer32]
@="C:WWProgram Files (x86)WWBaroPAWWWbaropam\_x64.dll"
"ThreadingModel"="Apartment"
[HKEY\_LOCAL\_MACHINEWSOFTWAREWMicrosoftWWindowsWCurrentVersionWAuthenticationWCredential Provider
FiltersW{325D6690-E5AC-4570-B15A-19A622571036}]
@="BaroPAMLogon"

Second, if you execute the "register\_x64.reg" file, which is a **BaroPAM** registry registration file, the following "User Account Control" screen appears.





Thirdly, since you need to allow the registry editor to change the device, click the "Yes" button and the following "Registry Editor" screen will appear.

Registr	y Editor
4	Adding information can unintentionally change or delete values and cause components to stop working correctly. If you do not trust the source of this information in C:\Program Files (x86)\BaroPAM\register_x64.reg, do not add it to the registry.
	Ves No

Fourth, after checking the contents of the "**Registry Editor**" screen, click the "**Yes**" button to register the **BaroPAM** registry, and the following "**Registry Editor**" screen appears.

🚹 Re	gîstry Editor	×
0	The keys and values contained in C:\Program Files (x86)\BaroPAM\register_x64 successfully added to the registry.	.reg have been
		ОК

Click the "OK" button on the screen above to complete BaroPAM's registry registration.

Note) After reusing **BaroPAM**, do not reboot Windows, but use "Winkey+L" to test.

## 4. BaroPAM delete

In order to delete **BaroPAM**, you must first remove the information registered in the registry about BaroPAM, and then delete **BaroPAM**. (Refer to "**3.2 How to Disable BaroPAM**")

## 4.1 BaroPAM delete

First, if you register "Add or remove programs" in the search input item at the bottom left of Windows, the following screen appears.



Second, if you click "Add or remove programs" on the screen above, the following "Apps & features" screen appears.



#### BaroPAM

A dhs Local Account	Apps > Apps & features		
Find a setting	p 46 apps found		
System	BaroPAM Manager - v1.0.20 v1.0.20   Nunit Corp.   7/31/2023	172 M8	1
Bluetooth & devices     Network & internet	Calculator Microsoft Corporation   7/28/2023	16.0 KB	ŧ
Personalization	Camera Microsoft Corporation   7/29/2023	8.00 K8	I
Accounts	Chrome 115.0.5790.110   Google LLC   7/29/2025		ł
Gaming	Clock Microsoft Corporation   7/28/2023	16.0 KB	I
Accessibility Privacy & security	Containa Atlicessoft Corporation   7/25/2023	8.00 KB	I
Windows Update	Feedback Hub Microsoft Corporation   7/29/2023	16.0 KB	I
	Get Help Microsoft Corporation   7/29/2023	16.0 KB	ŧ
	Mail and Calendar		+

Third, on the "App & features" screen, select "BaroPAM Manager" to delete as follows and click the "Uninstall" button to delete "BaroPAM".

#### BaroPAM

Settings A dhs Local Account	Apps > Apps & features	- □ >
Find a setting	46 apps found	
System	BaroPAM Manager - v1.0.20 v1.0.20   Navit Corp.   7/31/2025	172 M8 🕴
Bluetooth & devices     Network & internet	Calculator Microsoft Corporation   7/29/2023	all
Personalization     Apps	Camera Microsoft Corporation   7/29/2028	8.00 К8
Accounts	Chrome 115.0.5790.110   Google LLC   7/28/2023	I
<ul> <li>Time &amp; language</li> <li>Gaming</li> </ul>	Clock Microsoft Corporation   7/29/2028	16.0 KB İ
Accessibility     Privacy & security	Cortana Microsoft Corporation ( 7/29/2023	8.00 KB :
Windows Update	Feedback Hub Microsoft Corporation   7/29/2023	16.0 KB 1
	Get Help Microsoft Corporation   7/29/2028	16.0 KB 🕴
	Mail and Calendar	inc



## 5. BaroPAM FAQ

## Message: After installing BaroPAM for Windows, the logon screen does not appear and malfunction occurs when logging on.

Cause: "Computer name" or "PC name" occurs because it contains Korean characters.

Action: Click "Explorer -> This PC -> Right-click -> Properties", check if "Computer Name" or "PC Name" contains Korean characters, and make sure to "use a combination of English letters, hyphens, and numbers" do.

#### Message: If you cannot log in because the OTA key does not match.

Cause: BaroPAM is a time synchronization method, so the time of the phone and Windows or Server must be the same.

Action: Check if the phone and Windows or Server time are correct.

## Message: The "OTA key" is incorrect because the date and time of the Android phone or iPhone are different from the current time.

Cause: This is caused by not using the time provided by the network for the Android or iPhone's date and time.

Action: For Android phones, go to "Settings" -> "General management" -> "Date and time" ->

"Automatic date and time" and "Automatic time zone" -> "Allow"

For iPhone, go to "Settings" -> "Date & Time" -> "Set Automatically" -> "Allow"

#### Message: A 30 second delay for the logon script process to complete

If you log on after deploying the Windows OS through a specific master image, the logon speed continues to take a long time.

Cause: On computers running Windows OS, the "Run logon scripts synchronously" group policy is enabled, so when trying to log on, the splash screen is displayed for 30 seconds. This is because the logon script then works with the user before the logon script process completes.

Action: As a workaround, changing the Timeout interval to less than 30 seconds improved logon speed.

- 1. Start -> Run -> Run regedit.msc Registry Editor
- 2. Go to the next path HKEY\_LOCAL\_MACHINEWSOFTWAREWMicrosoftWWindowsWCurrentVersionWPoliciesWSystem
- 3. Create or modify the following values

Name : DelayedDesktopSwitchTimeout

Type : REG\_DWORD

Value: 5

4. Check logon speed improvement after system restart.

## Message: Even after deleting a Windows program, it is automatically reinstalled when the system is restarted.

Cause: This is because the image at the time of the last backup was loaded when Windows was restarted due to management programs such as PC automatic backup.

Presumed to be installed through user consent when a user downloads and executes a specific file on the Internet or through an update method after installing a program.

In reality, these installations are done by tricking or misleading users so that they don't see them properly.

When registered in the startup program folder, the file is repeatedly executed every time the system starts unless the file is removed.

Action: Find and remove files registered in the Startup folder (C:WDocuments and SettingsW(User Account)WStart MenuWProgramsWStart program).

#### Message: Failed to open file "Filename" [error message]"



Cause: Occurs when Filename, an environment setting file, cannot be opened.

Action: After checking the error message, check if the configuration file exists and then reset it on the BaroPAM Setup screen.

#### Message: Invalid RATE\_LIMIT option. Check pam\_baro\_auth.ini

- Cause: Occurs when the RATE\_LIMIT setting value among the contents of the pam\_baro\_auth.ini file, which is an environment setting file, is incorrectly set.
- Action: Check the setting values ??of the limit count (1 < RATE\_LIMIT < 100) and the limit time (1 < interval < 3600).

Reset after confirmation on the BaroPAM Setup screen.

#### Message: Invalid list of timestamps in RATE\_LIMIT. Check pam\_baro\_auth.ini

Cause: Occurs when updated timestamps in the RATE\_LIMIT option among the contents of the pam\_baro\_auth.ini file, an environment setting file, are incorrect.

Action: Check the updated timestamps in the RATE\_LIMIT option of the pam\_baro\_auth.ini file, which is an environment setting file.

#### Message: Try to update RATE\_LIMIT line.

Cause: The message displayed when you log in normally. Action: No action

#### Message: Too many concurrent login attempts. Please try again.

Cause: Occurs when the DISALLOW\_REUSE option (only one login is allowed within the OTA key generation cycle time) of the configuration file pam\_baro\_auth.ini file is set and login is retried within the OTA key generation cycle time after successful login.

Action: Login retry after one-time authentication key generation cycle time.

#### Message: Can't find ACL\_TYPE[error message]

- Cause: Occurs when there is no ACL\_TYPE option or set value in pam\_baro\_auth.ini, an environment setting file.
- Action: Check the ACL\_TYPE option or setting value of the pam\_baro\_auth.ini file, which is an environment setting file.

Reset after confirmation on the BaroPAM Setup screen.

#### Message: Can't find ACL\_FILE[error message]

- Cause: Occurs when there is no ACL\_FILE option or set value in pam\_baro\_auth.ini, an environment setting file.
- Action: Check the ACL\_FILE option or setting value of the pam\_baro\_auth.ini file, which is an environment setting file.

Reset after confirmation on the BaroPAM Setup screen.

#### Message: Invalid WINDOW\_SIZE option in pam\_baro\_auth.ini

- Cause: Occurs when the WINDOW\_SIZE setting value (calibration time based on the current time) of the contents of the pam\_baro\_auth.ini file, which is an environment setting file, is incorrectly set.
- Action: Based on the current time, check the set value of the one-time authentication key calibration time (1 < WINDOW\_SIZE < 100).

### Message: Trying to reuse a previously used time-based code. Retry again in 30 seconds.

Warning! This might mean, you are currently subject to a man-in-the-middle attack.

Cause: The DISALLOW\_REUSE option in the pam\_baro\_auth.ini file, an environment setting file, is an option in preparation for man-in-the-middle attacks.



A man-in-the-middle attack occurs when an unauthorized entity places itself between two communication systems and intercepts the passing of information that is currently in progress. In a nutshell, what could be called a modern wiretapping system.

Action: No action

#### Message: Failed to allocate memory when updating pam\_baro\_auth.ini

Cause: Occurs when memory allocation fails when updating the configuration file pam\_baro\_auth.ini. Action: Technical support

#### Message: Can't find HOSTNAWE[error message]

- Cause: Occurs when there is no HOSTNAME option or set value in pam\_baro\_auth.ini, which is an environment setting file.
- Action: Check the HOSTNAME option or setting value of the pam\_baro\_auth.ini file, which is an environment setting file.

Reset after confirmation on the BaroPAM Setup screen.

#### Message: Can't find SECURE\_KEY[error message]

- Cause: Occurs when there is no SECURE\_KEY option or set value in pam\_baro\_auth.ini, an environment setting file.
- Action: Check the SECURE\_KEY option or setting value of the pam\_baro\_auth.ini file, which is an environment setting file.

Reset after confirmation on the BaroPAM Setup screen.

#### Message: Can't link DB [error message]

- Cause: Occurs when there are no DB link options or setting values in the DB file, pam\_baro\_db.ini file.
- Action: Check the DB link option or setting value of the pam\_baro\_db.ini file, which is a DB file. Reset after confirmation on the BaroPAM Setup screen.

#### Message: Invalid verification code

Cause: Occurs when verification of the OTA key fails. Action: Login retry.

## 6. About BaroPAM



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