

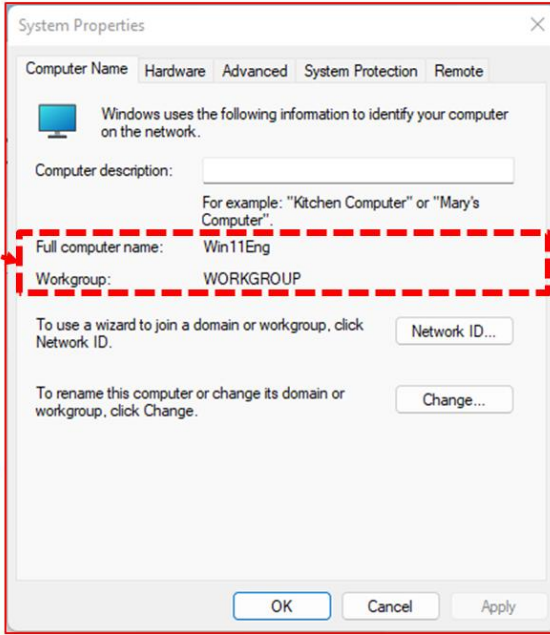
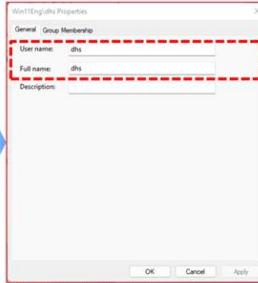
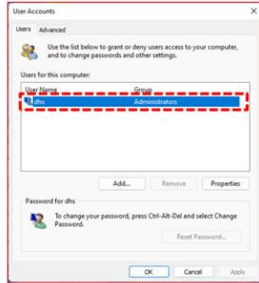
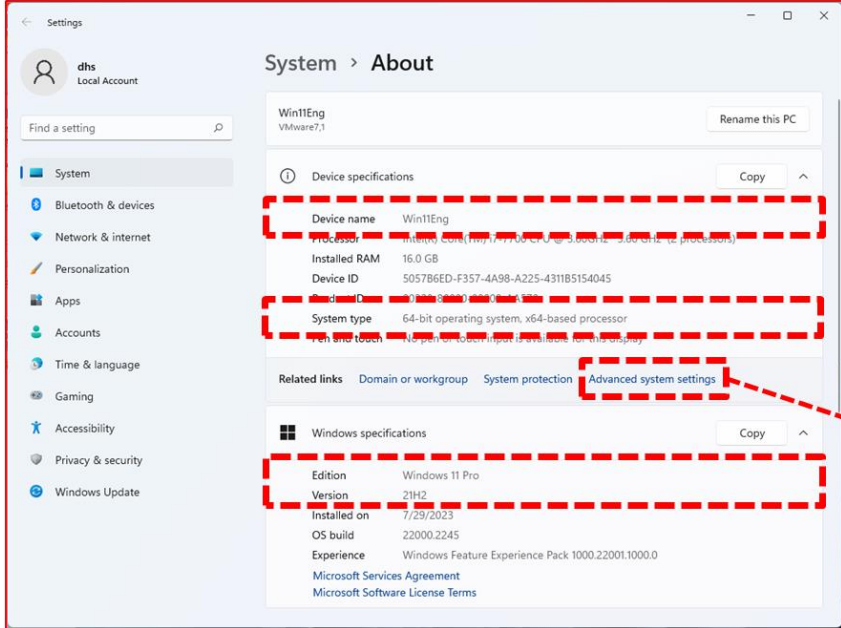
For **3-step authentication** to strengthen the security of information assets

BaroPAM Solution Installation Summary (Windows)

Dec, 2023

BaroPAM Windows installation(Typical)

1. Pre-requisites



(Search Windows -> Enter 'netplwiz' -> Open)

Remember the following Windows information.

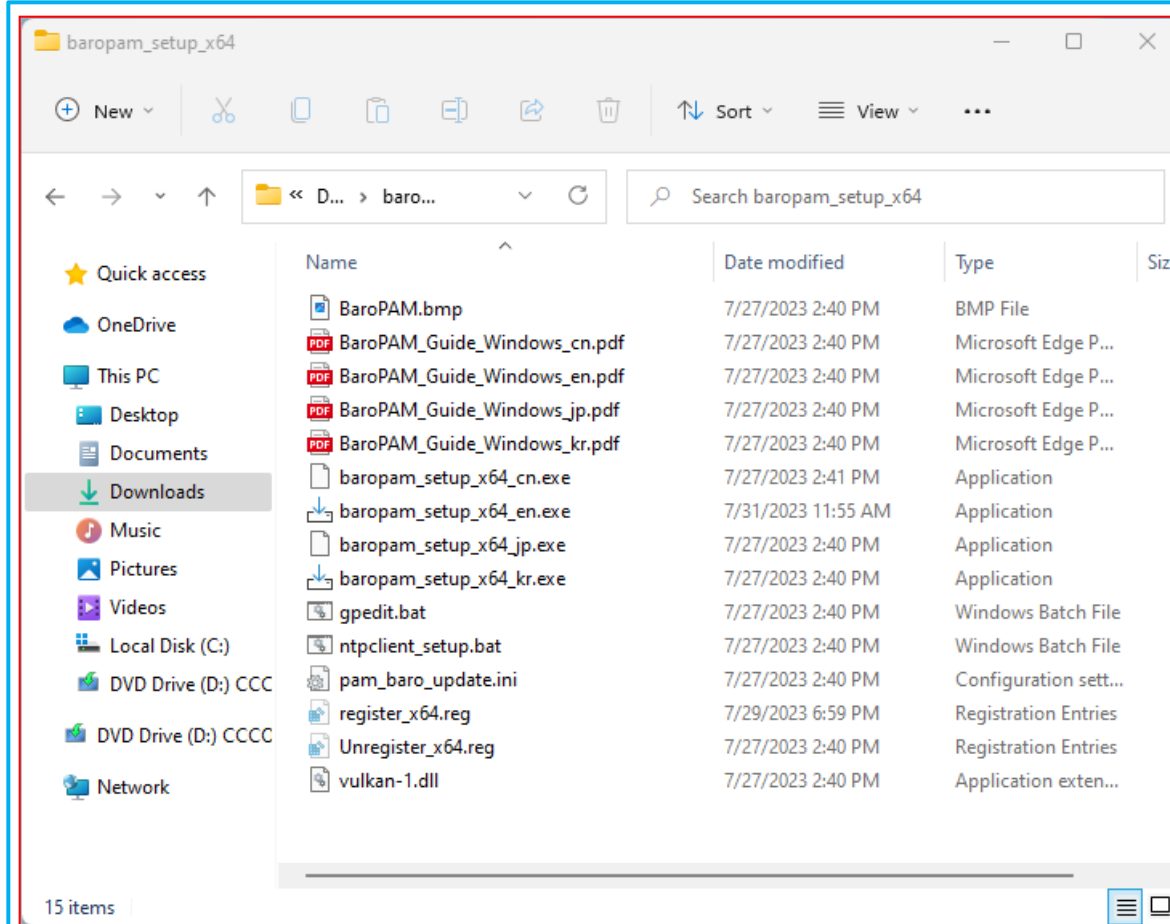
- User account/password
- Windows version/system type
- Workgroup or domain information

If you want to use BaroPAM, Use for a Windows user account Set a password, or temporarily set a password Revoke (password after installing BaroPAM reset).

Download BaroPAM installation file for Windows → Nurit Blog(<https://mc529.tistory.com/1407>)

1. BaroPAM Windows installation(Typical)

2. Preparing to Install BaroPAM

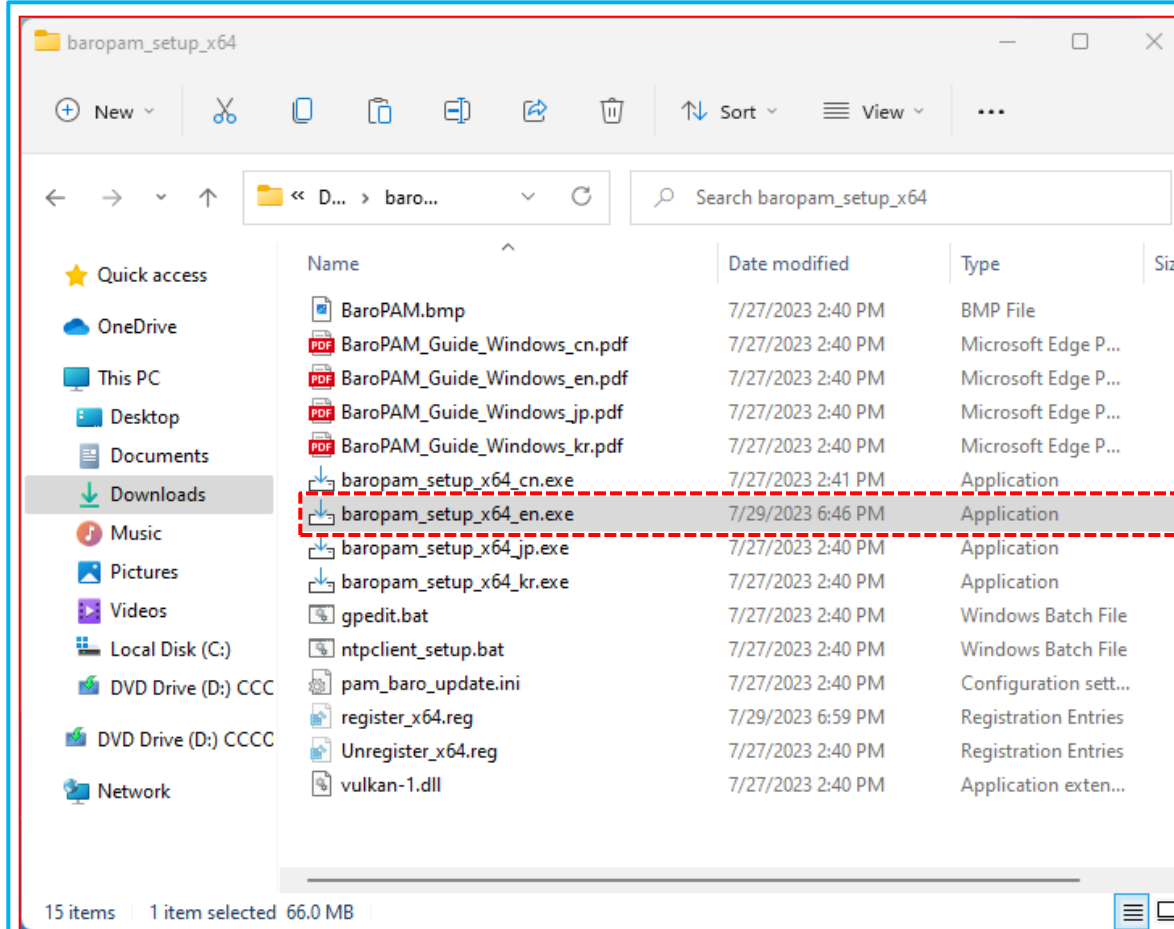


When the compressed **BaroPAM** installation file (baropam_setup_x64.zip) is unzipped, the following baropam_setup_x64" directory is created, and the following files exist.

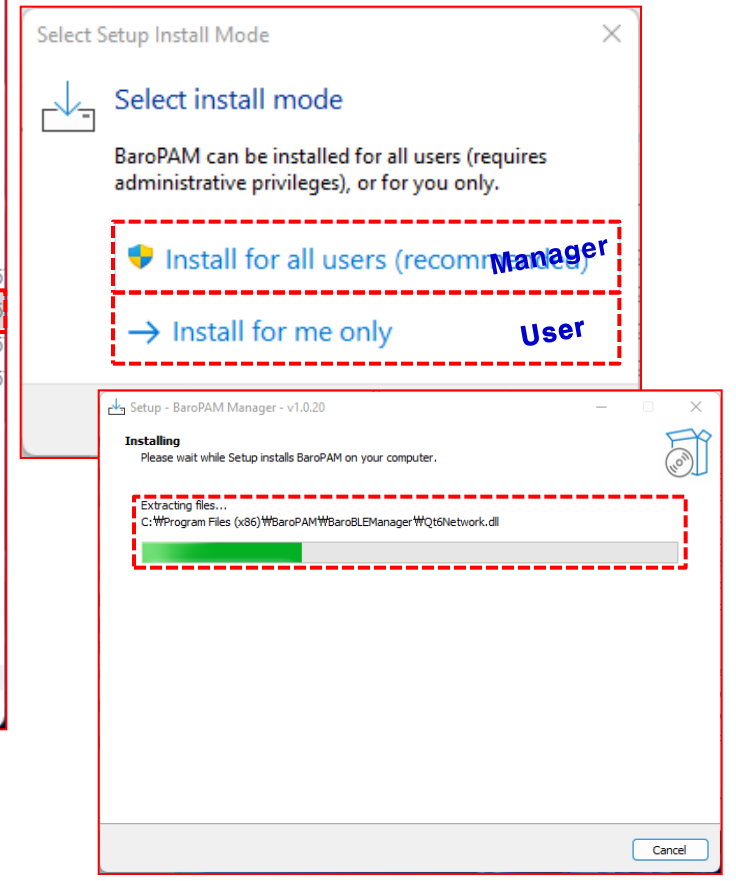
- BaroPAM logo image(size 354 X 354): BaroPAM.bmp
- BaroPAM User Guide(Chinese): BaroPAM_Guide_Windows_cn.pdf
- BaroPAM User Guide(English): BaroPAM_Guide_Windows_en.pdf
- BaroPAM User Guide(Japanese): BaroPAM_Guide_Windows_jp.pdf
- BaroPAM User Guide(Korean): BaroPAM_Guide_Windows_kr.pdf
- BaroPAM Installer(Chinese): baropam_setup_x64_cn.exe
- BaroPAM Installer(English): baropam_setup_x64_en.exe
- BaroPAM Installer(Japanese): baropam_setup_x64_jp.exe
- BaroPAM Installer(Korean): baropam_setup_x64_kr.exe
- Face recognition configuration file: KF3_API.ini
- Local Group Policy Editor installation file: gpdedit.bat
- NTP Client Settings: ntpclient_setup.bat(time.windows.com is set)
- Update URL configuration file: pam_baro_update.ini(<http://nuriapp.com/update> is set)
- Registry registration file: register_x64.reg
- Registry removal file: Unregister_x64.reg

BaroPAM Windows installation(Typical)

3. Install BaroPAM

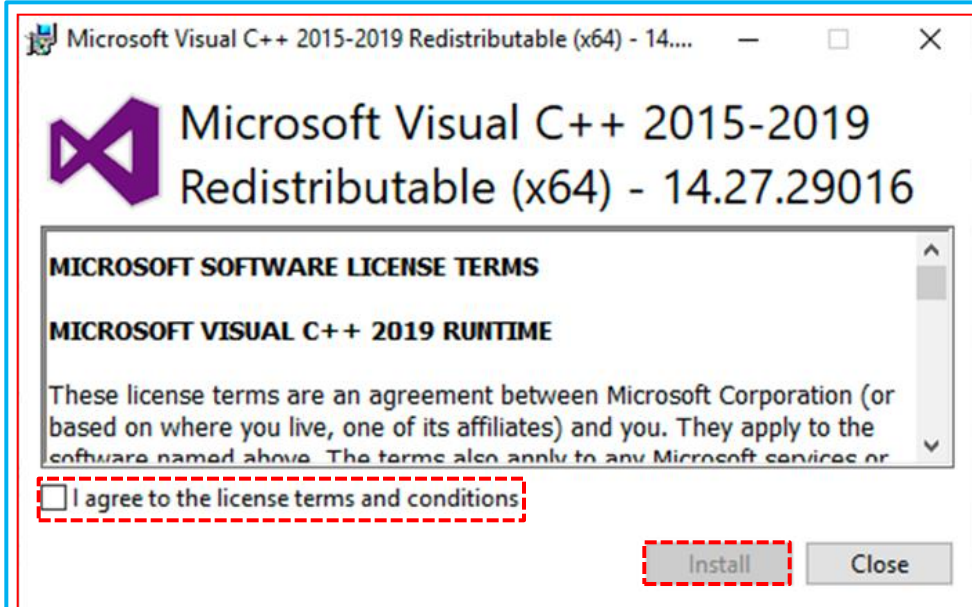


To run the **BaroPAM** installation file, select the installation file (**baropam_setup_x64_kr.exe**) suitable for Windows and click the installation file to proceed with the installation of **BaroPAM** modules.



BaroPAM Windows installation(Typical)

4. Run the vcredist program



Microsoft Visual C++ 2015-2019 Redistributable (x64) - 14.27.29016

MICROSOFT SOFTWARE LICENSE TERMS

MICROSOFT VISUAL C++ 2019 RUNTIME

These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. They apply to the software named above. The terms also apply to any Microsoft services or

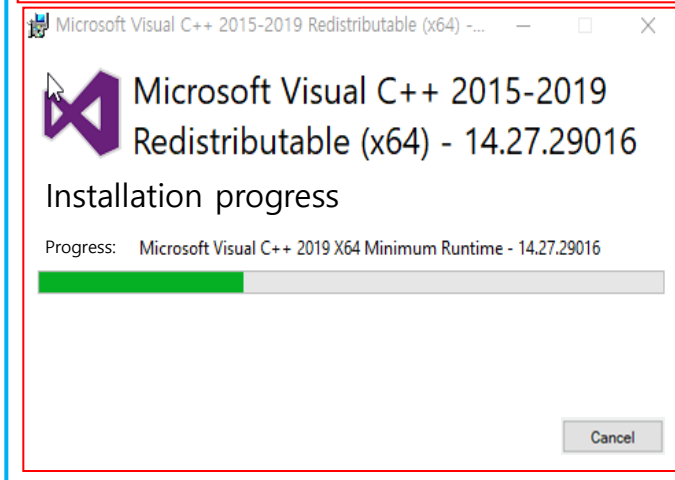
I agree to the license terms and conditions

Install Close

When trying to run Microsoft Visual C++ downloaded programs, the necessary vcredist programs appear as follows: "Microsoft Visual C++ 2015-2019 Redistributable (x64) - ..." installation screen.

"Microsoft Visual C++ 2015-2019 Redistributable (x64) - ..." After confirming the "MICROSOFT SOFTWARE LICENSE TERMS" on the installation screen, select "Agree" and click the "Install" button, and the following "Installation Progress" screen appears.

When the "Microsoft Visual C++ 2015-2019 Redistributable(x64) - ..." installation is complete, the following "Setup Successful" screen appears.

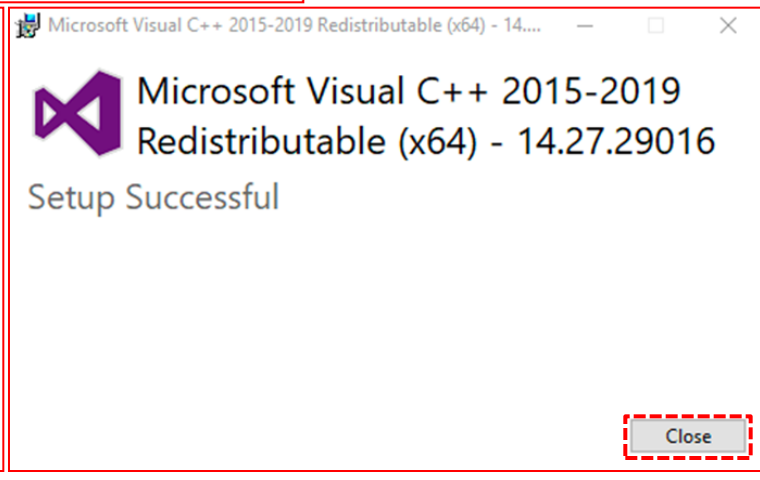


Microsoft Visual C++ 2015-2019 Redistributable (x64) - 14.27.29016

Installation progress

Progress: Microsoft Visual C++ 2019 X64 Minimum Runtime - 14.27.29016

Cancel



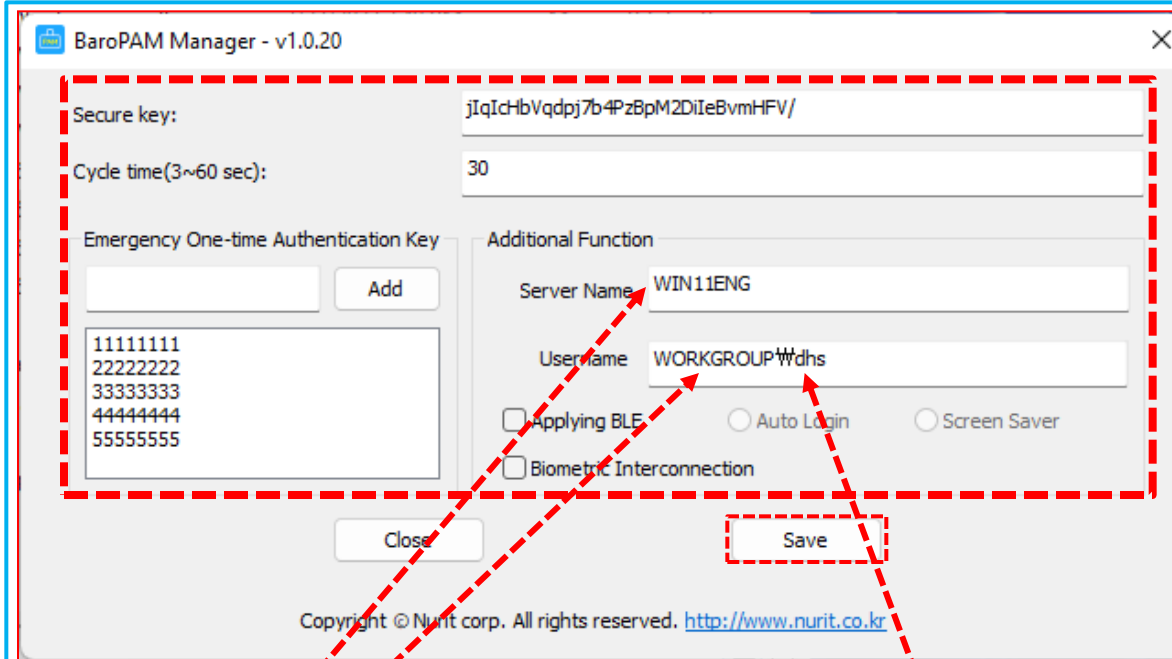
Microsoft Visual C++ 2015-2019 Redistributable (x64) - 14.27.29016

Setup Successful

Close

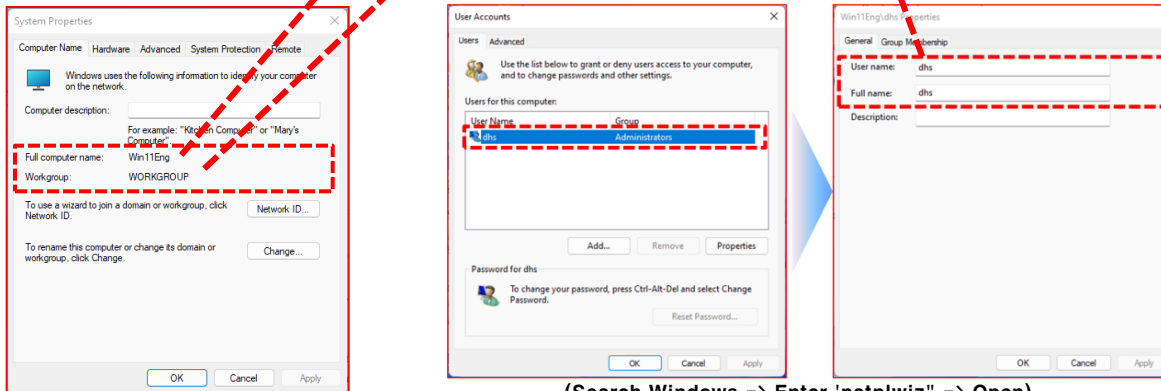
BaroPAM Windows installation(Typical)

5. BaroPAM environment settings



When the **BaroPAM** module installation is completed normally, the "BaroPAM Manager" screen appears.

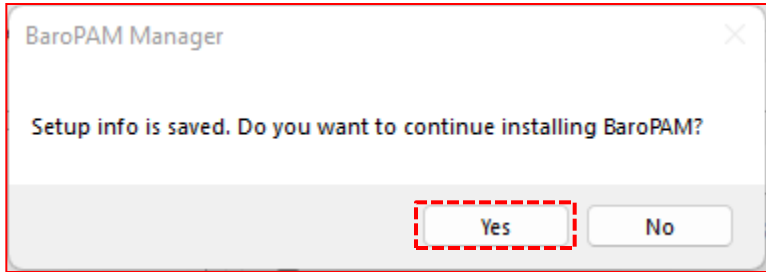
- Use the default settings as they are. Secure key will be issued to each individual later, and must be copied and put in.
- The emergency one-time authentication key is an emergency key used when a OTA key cannot be generated, so you must remember it. Used keys are removed.
- Server name as a separator, specify computer name.
- Username specifies "Workgroup\Username" in case of using "Local user", "MicrosoftAccount\MS registration account" in case of using "Microsoft Account", and "domain name" in case of "Windows server".
- Click the "Save" button.



(Search Windows -> Enter 'netplwiz' -> Open)

6. BaroPAM Windows installation(Typical)

6. Registering BaroPAM in the Registry



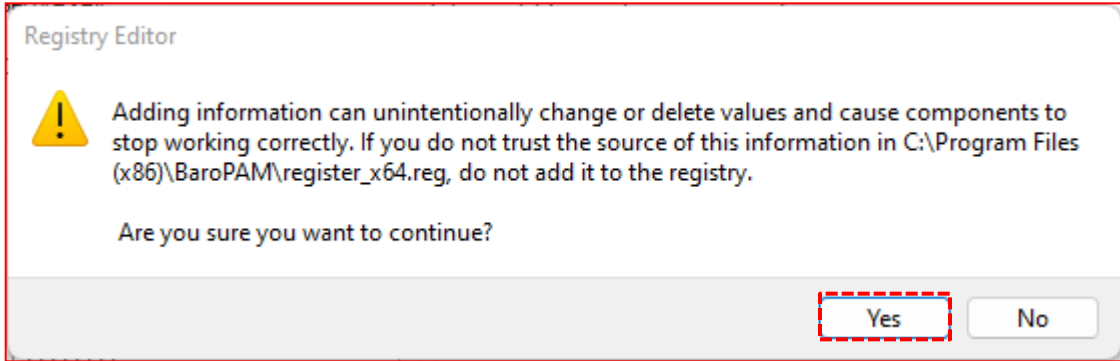
BaroPAM Manager

Setup info is saved. Do you want to continue installing BaroPAM?

Yes No

If you click the "Close" button on the "Setup Successful" screen, the following "Registry Editor" screen appears to register BaroPAM in the Windows Registry.

After checking the contents of the "Registry Editor" screen, click the "Yes" button to register the BaroPAM registry, and the BaroPAM registry registration process proceeds.

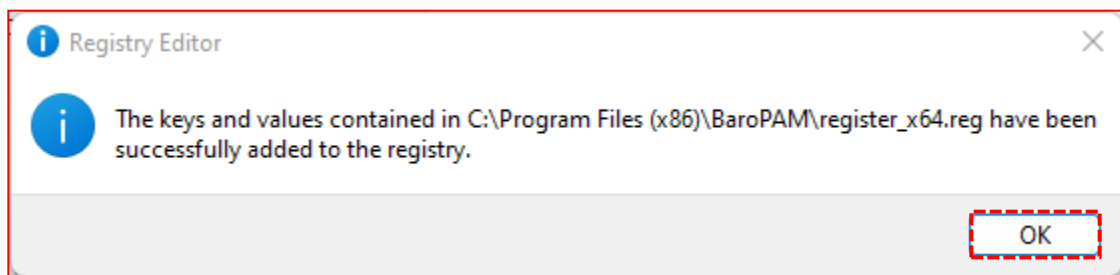


Registry Editor

⚠ 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



Registry Editor

ℹ The keys and values contained in C:\Program Files (x86)\BaroPAM\register_x64.reg have been successfully added to the registry.

OK

BaroPAM Windows installation(Typical)

7. Install BaroPAM app and set information

The collage consists of several screenshots:

- BaroPAM App Download:** Two boxes showing the app on Google Play and the App Store, each with a QR code.
- BaroPAM App Interface:** A screenshot of the app's main screen with a blue shield icon containing 'PAM' and two buttons: 'Verification code' and 'One Time Auth key'.
- BaroPAM Setup:** A screenshot of the 'Register server information' screen. It has fields for 'Server name' (WIN11ENG), 'Secure key' (jqlcHbVodg7b4PzBpM2DleBvmHFV), and 'Auth key cycle time(3-60 Seconds)' (30). A 'Save' button is at the bottom.
- Windows System Properties:** A screenshot of the 'System Properties' dialog box, 'Computer Name' tab. The 'Full computer name' is WIN11ENG and the 'Workgroup' is WORKGROUP. A red dashed box highlights these fields.
- Windows User Accounts:** A screenshot of the 'User Accounts' dialog box, 'Users' tab. The 'User name' is 'ifs'. A red dashed box highlights this field.
- Windows Network Settings:** A screenshot of the 'Network Settings' dialog box, 'Advanced' tab. A red dashed box highlights the 'Use the full list to grant or deny users access to your computer, and to change passwords and other settings.' checkbox.

Arrows indicate the flow of information: from the app's 'Verification code' to the Windows 'System Properties' 'Workgroup' field; from the app's 'One Time Auth key' to the Windows 'User Accounts' 'User name' field; and from the app's 'Secure key' to the Windows 'Network Settings' 'Advanced' checkbox.

BaroPAM app can be used on Android 6.0 (Marshmallow) 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 "Cycle time, Secure Key, Server Name" entered in the "BaroPAM Setup" screen to "Register Server Information" in the **BaroPAM** App. You must enter the same on the screen.

If you set the app code (kr: Korean, en: English, jp: Japanese, cn: Chinese) on the **BaroPAM** app settings -> change screen settings screen, the **BaroPAM** app changes accordingly.

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"

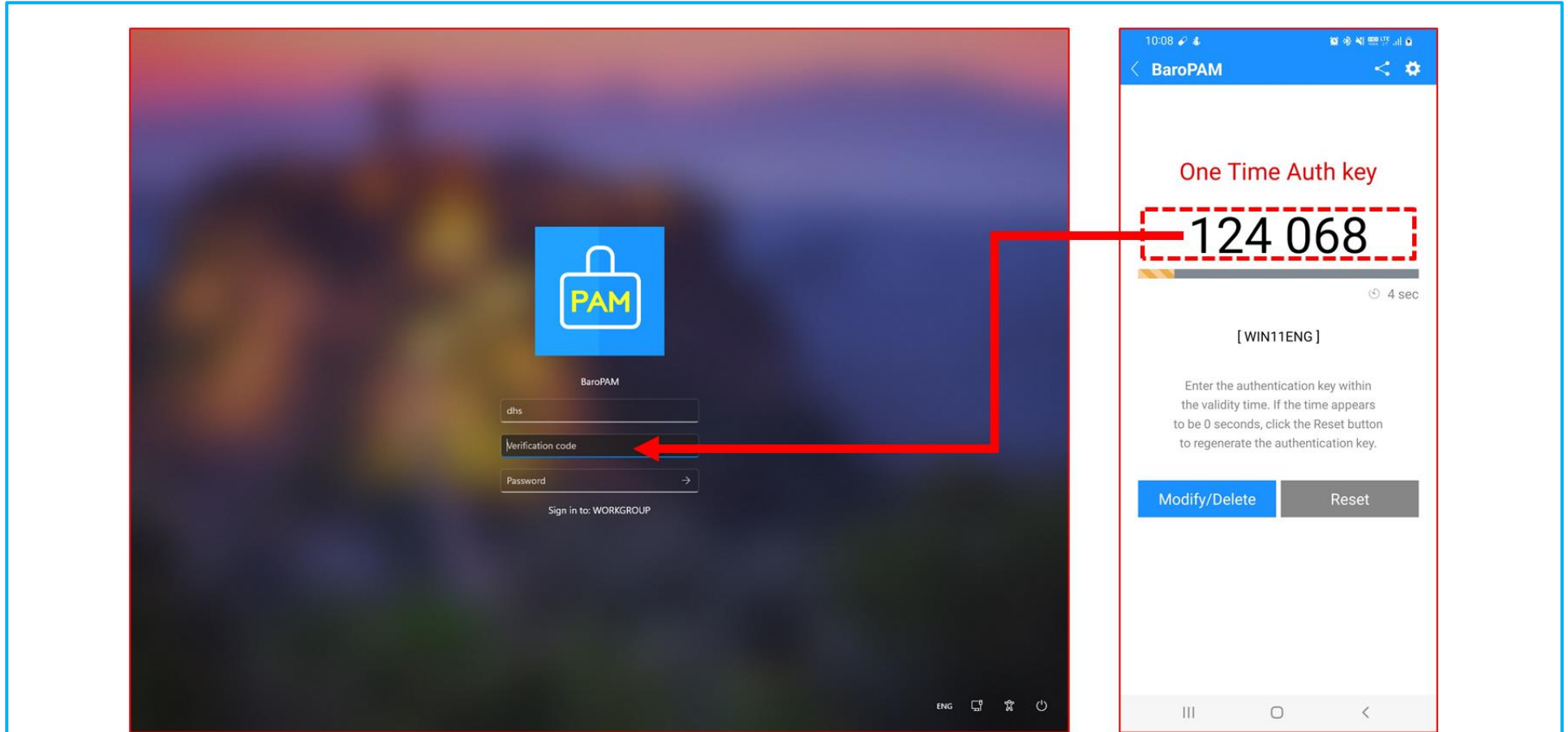
Message: If you cannot log in because the OTA key does not match.

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 time are correct.

BaroPAM Windows installation(Typical)

8. Windows logon



Enter your Windows user account (Username), generate a OTA key in the **BaroPAM** app on your smartphone, enter the OTA key you created in "Verification code" and "Password" in Windows, then "->" or "If you click the Enter" button, it requests authentication to the **BaroPAM** module, and if the verification is successful, you are logged on to Windows.

| . BaroPAM Windows installation(Typical)

9. What to Check When Problems Occur

1) Check the security log among Windows event logs with "Event Viewer"

By default, Event Viewer files use the .evt extension and are located in the "C:\Windows\System32\winevt\Logs" folder. The security log contains valid and invalid logon attempts and events.

2) Know which Windows information to install

- User account/password
- Windows version/system type
- Workgroup or domain information

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

3) Make sure that the BaroPAM installation file is correct for your Windows version

C:\Program Files (x86)\BaroPAM\pam_baro_update.ini

4) Check if the vcredist program is normally executed

It is an essential program when you want to run programs that are composed of Microsoft Visual C++ download.

5) Check BaroPAM configuration information

Capture of the BaroPAM configuration screen (BaroPAM Manager)

6) BaroPAM configuration program (BaroPAM Manager) checks if you are logged in

Windows Start -> BaroPAM -> Click BaroPAM Manager

7) Check the BaroPAM log file

Click "Log View" button on BaroPAM Manager screen or C:\Program Files (x86)\BaroPAM\pam_baro_auth.log

8) Know your environment

Delete programs that are installed without permission in integrated PC management programs, encrypt program contents, etc.

9) Check NTP Settings

Windows cmd -> Run "sc query w32time" command

|| . BaroPAM Windows installation(Biometric)

1. BaroPAM Settings Information

When the **BaroPAM** module installation is completed normally, the "BaroPAM Manager" Setup screen appears.

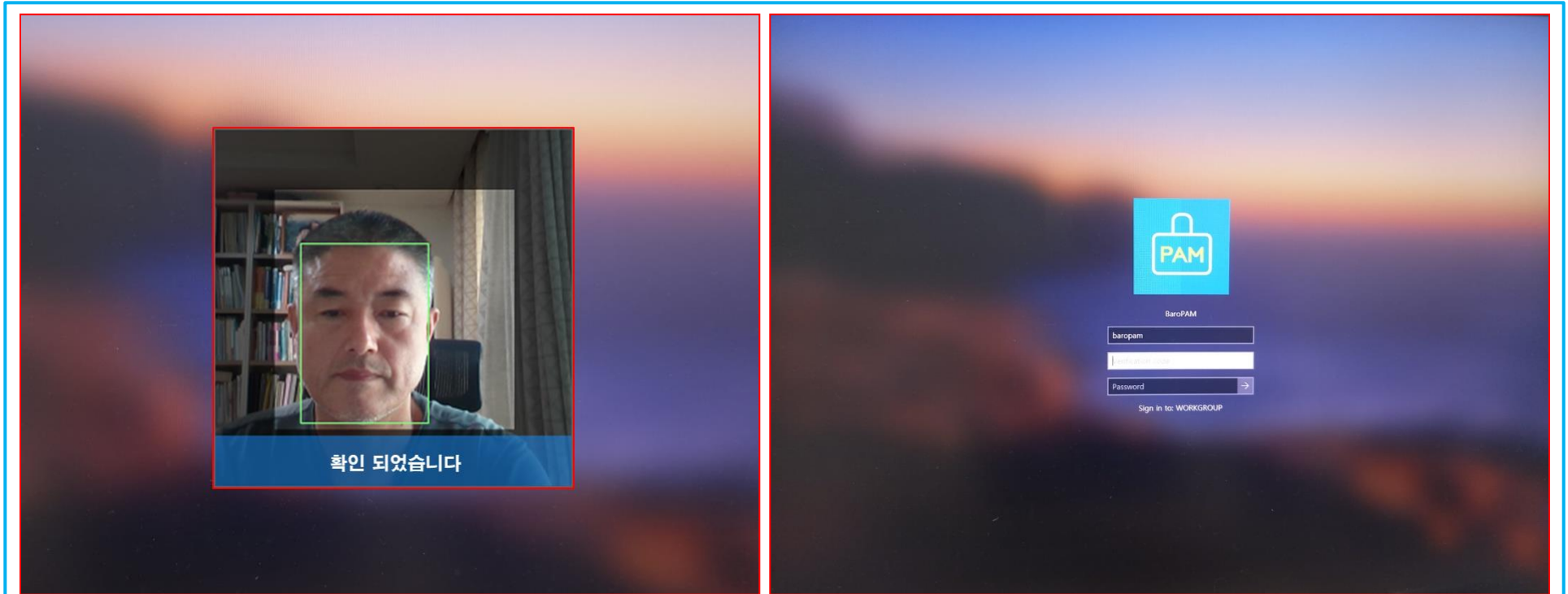
- Username specifies "Workgroup\Username" in case of using "Local user", "MicrosoftAccount\MS registration account" in case of using "Microsoft Account", and "domain name" in case of "Windows server".
- Click the "Save" button.

(Search Windows -> Enter 'netplwiz' -> Open)

Copyright © Nurit Corp. All rights reserved. <http://www.nurit.co.kr>

11. BaroPAM Windows installation(Biometric)

2. Windows logon



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, a screen to log on to Windows appears.

Enter the Windows user account (Username), enter "Password" and click the "->" or "Enter" button to request authentication from Windows, and if verification is successful, Windows logs on.

Password you don't need to remember!
BaroPAM will be with you.

Thank You!

www.nurit.co.kr
mc529@nurit.co.kr