

BaroPAM solution installation summary

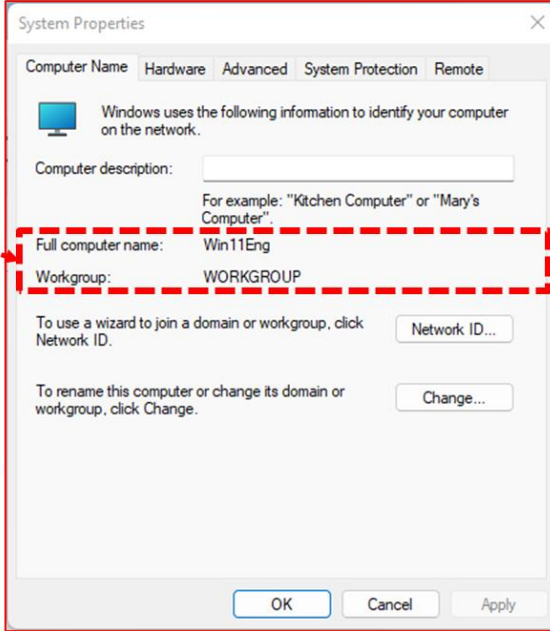
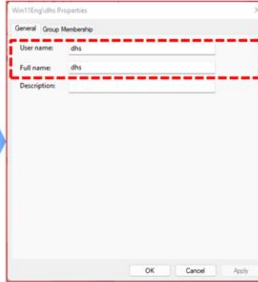
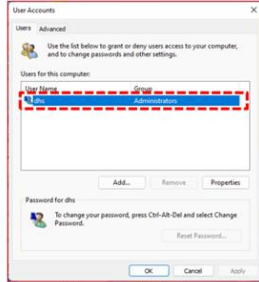
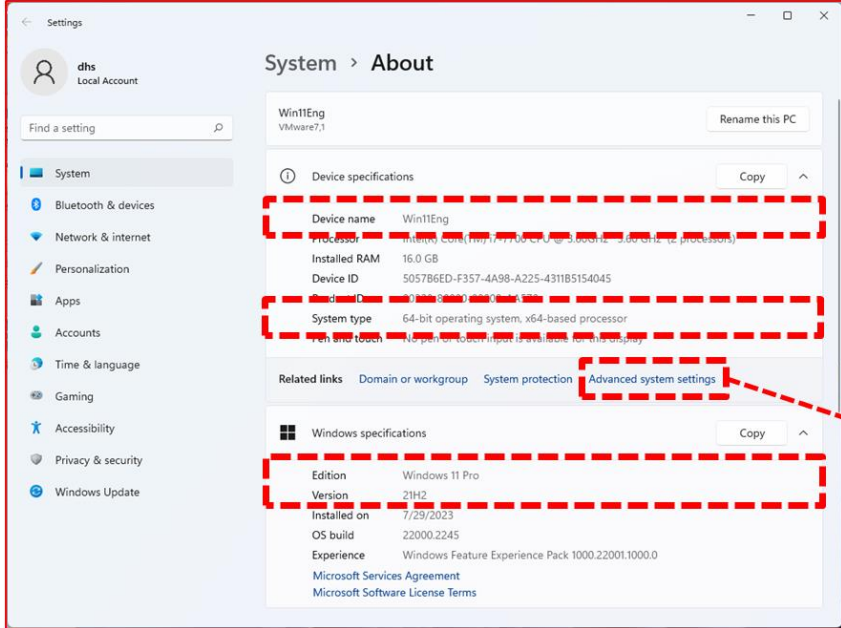
for **multi-layer authentication** to strengthen the security of information assets (Windows)

Feb, 2026



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

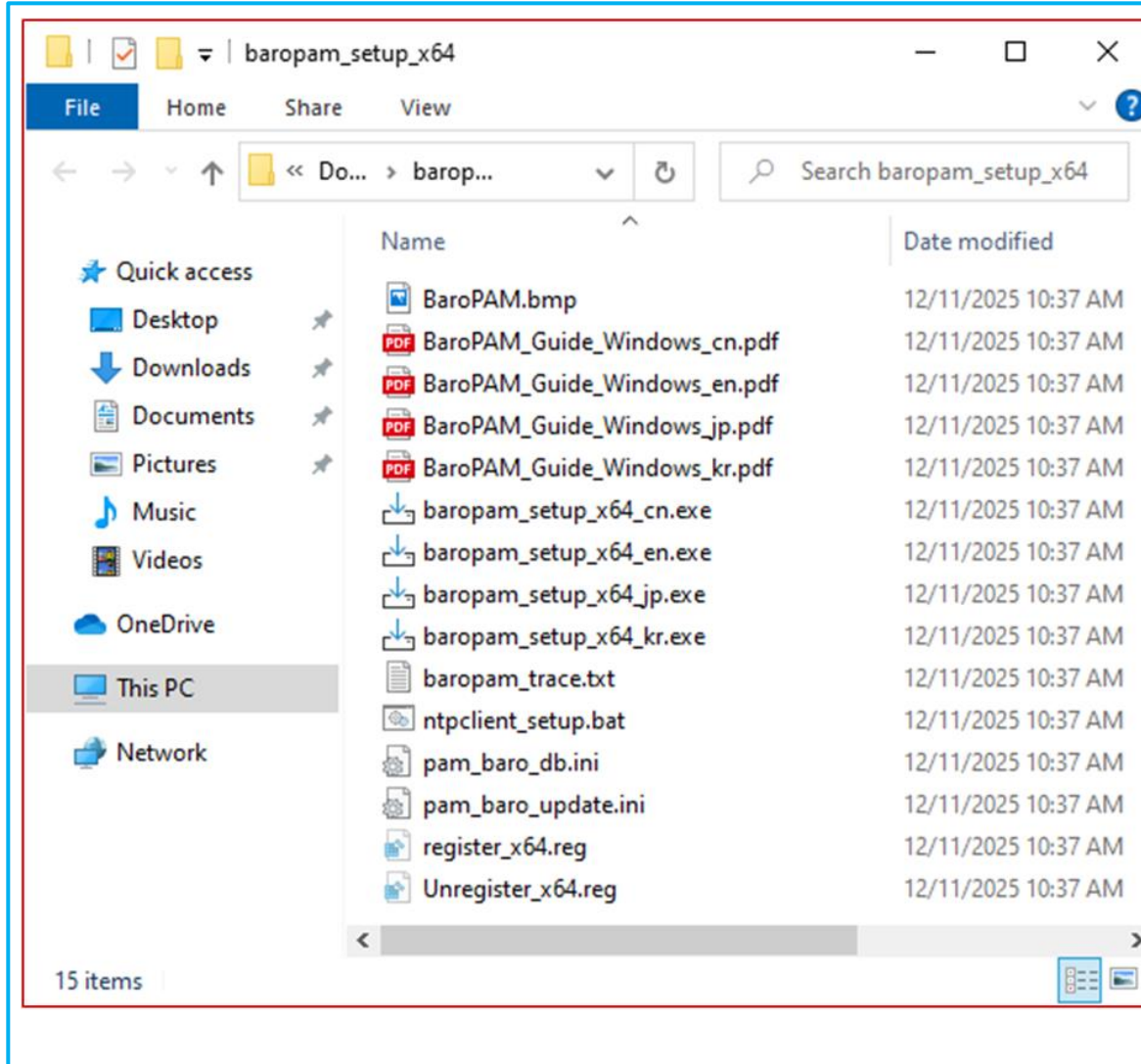
If you want to use BaroPAM, Use for a Windows user account Set a password, or temporarily set a password Revoke (password after installing BaroPAM reset).

Note) Among login options, only password is supported.

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

1. BaroPAM Windows installation(Typical)

2. Preparing to Install BaroPAM

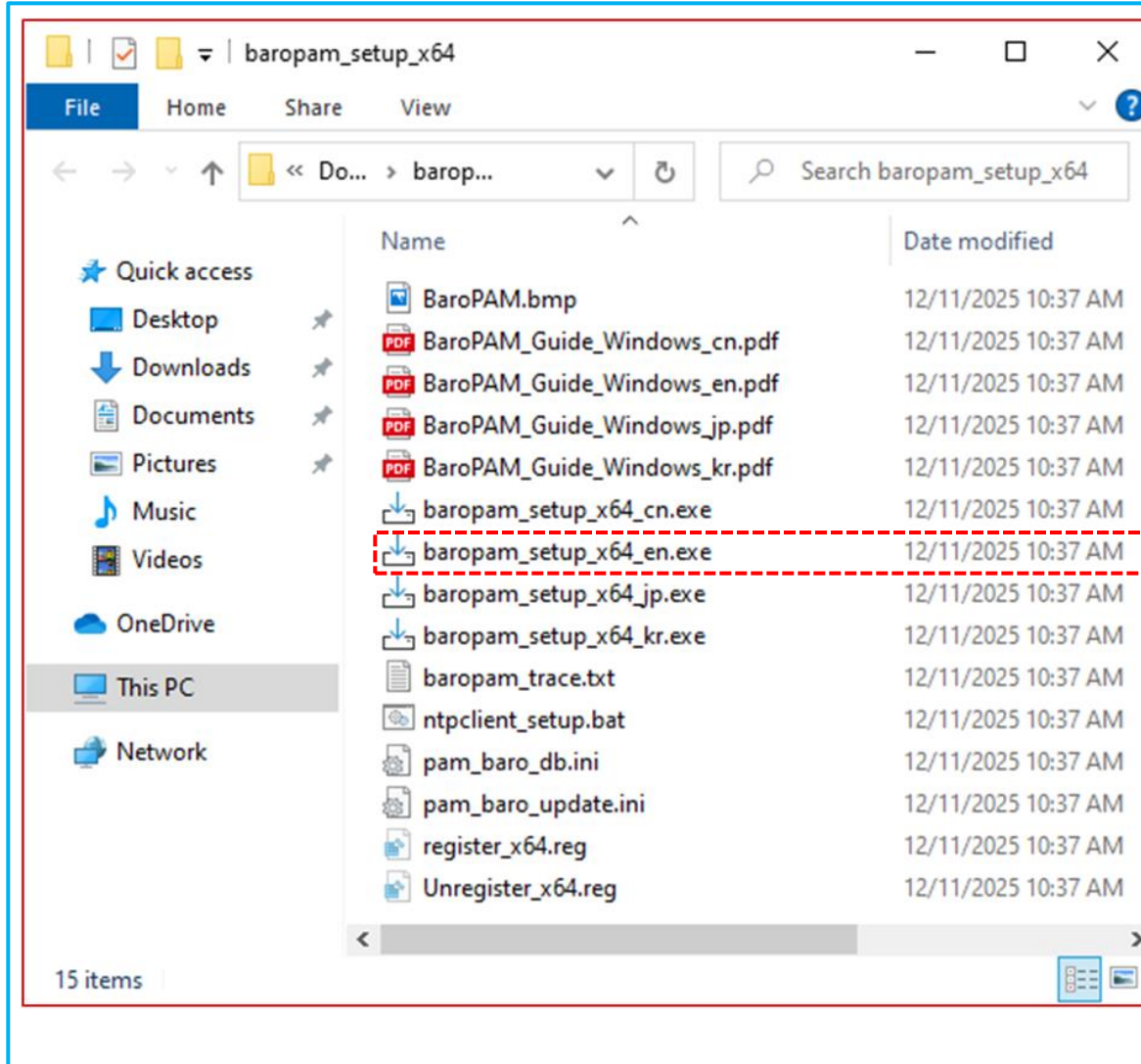


When the compressed **BaroPAM** installation file (baropam_setup_x64.zip) is unzipped, the following baropam_setup_x64" directory is created, and the following files exist.

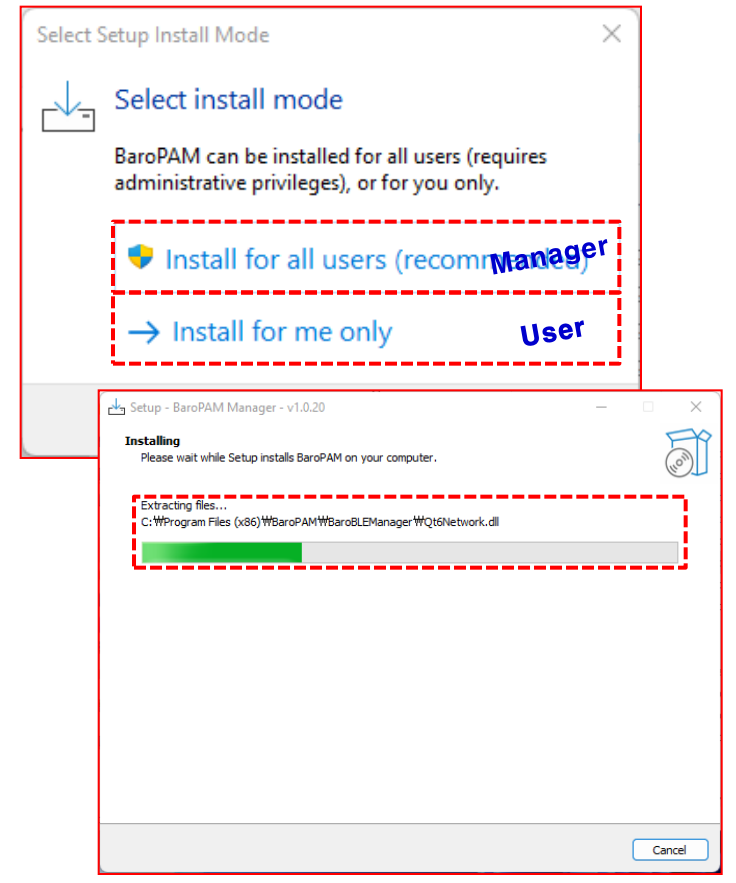
- BaroPAM logo image(Only square bmp images are supported): BaroPAM.bmp
- BaroPAM User Guide(Chinese): BaroPAM_Guide_Windows_cn.pdf
- BaroPAM User Guide(English): BaroPAM_Guide_Windows_en.pdf
- BaroPAM User Guide(Japanese): BaroPAM_Guide_Windows_jp.pdf
- BaroPAM User Guide(Korean): BaroPAM_Guide_Windows_kr.pdf
- 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
- NTP Client Settings: ntpclient_setup.bat(time.windows.com is set)
- MariaDB configuration file: pam_baro_db.ini
- 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

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

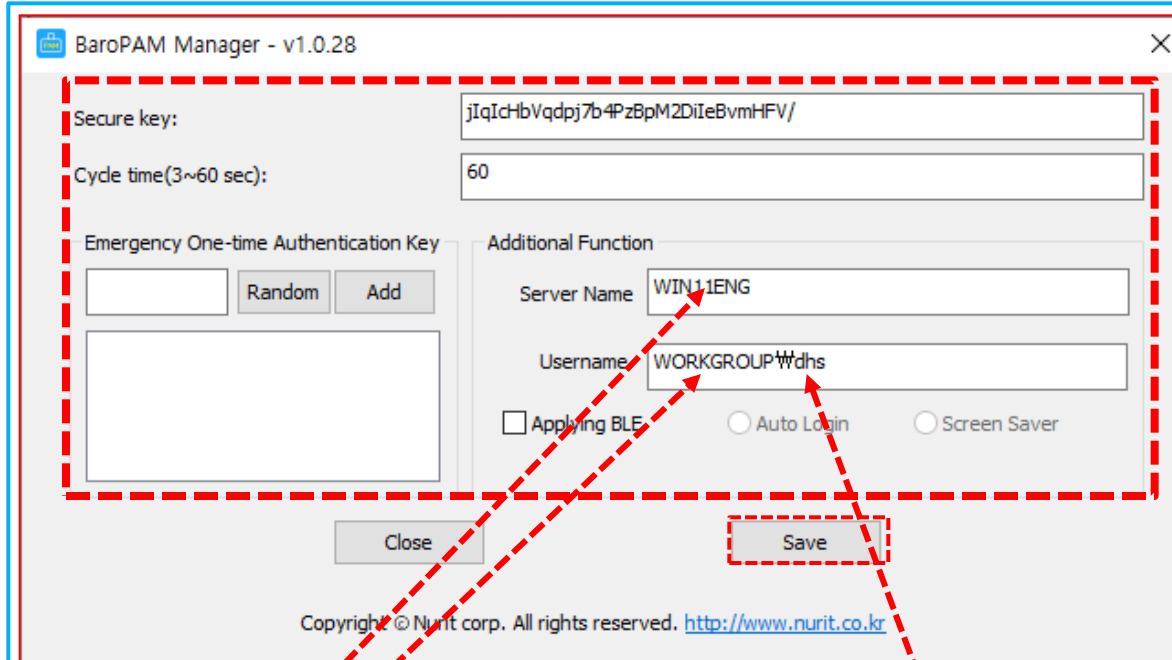
When trying to run Microsoft Visual C++ downloaded programs, the necessary vcredist programs appear as follows: "Microsoft Visual C++ 2015-2019 Redistributable (x64) - ..." installation screen.

"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.

BaroPAM Windows installation(Typical)

5. BaroPAM environment settings



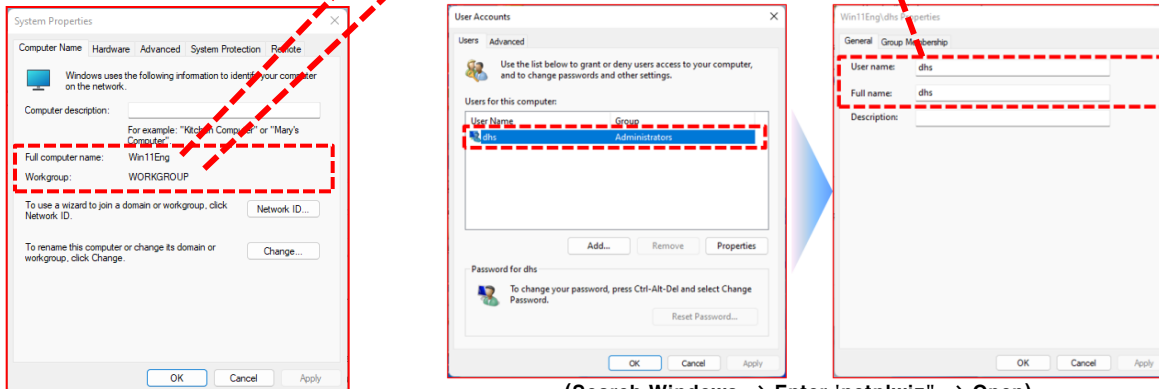
When the **BaroPAM** module installation is completed normally, the "BaroPAM Manager" screen appears.

- 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.

Note) To debug **BaroPAM** for Windows, create a file "c:\temp\baropam_trace.txt", then set "trace=on" as the file contents and save it.

If you want to stop debugging, set "trace=off" or delete "baropam_trace.txt".

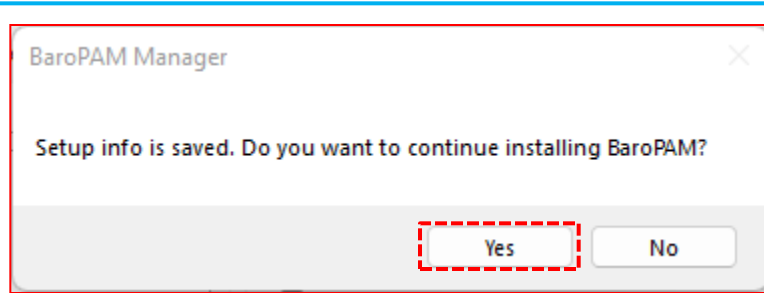
When debugging is enabled, "c:\temp\BaroPAM_CP_buglog.txt" is created and a debugging message is left in the file.



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

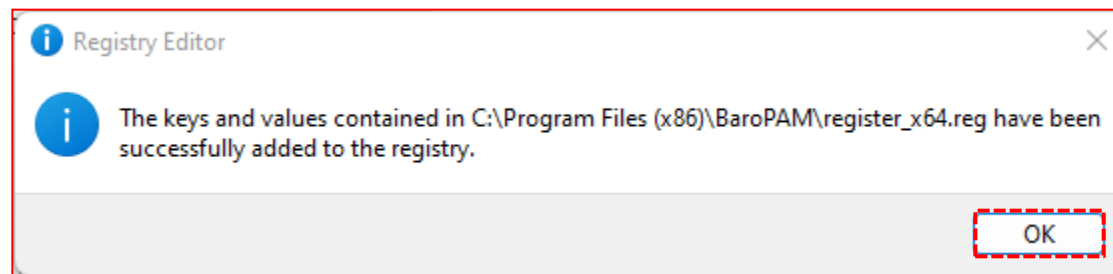
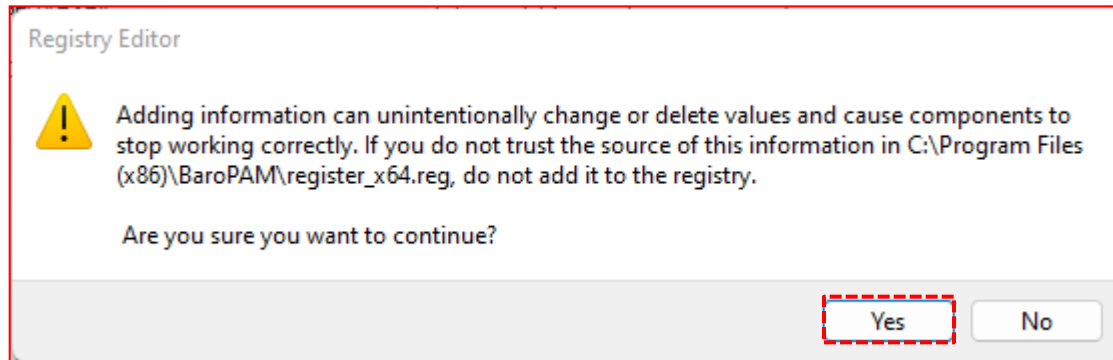
6. BaroPAM Windows installation(Typical)

6. Registering BaroPAM in the Registry



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

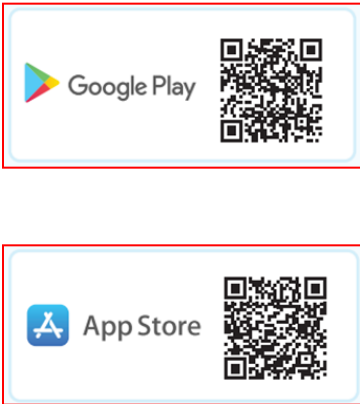
After checking the contents of the "Registry Editor" screen, click the "Yes" button to register the **BaroPAM** registry, and the **BaroPAM** registry registration process proceeds.



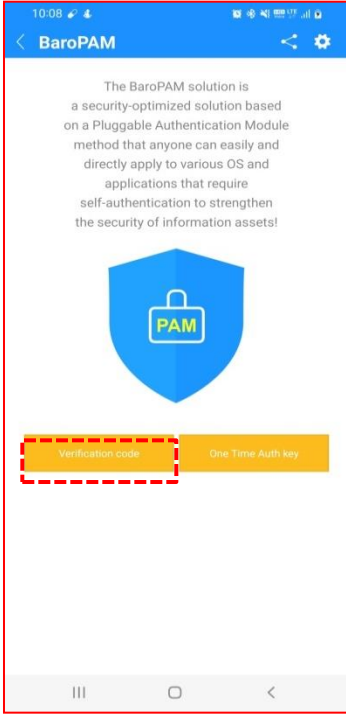
BaroPAM Windows installation(Typical)

7. Install BaroPAM app and set information

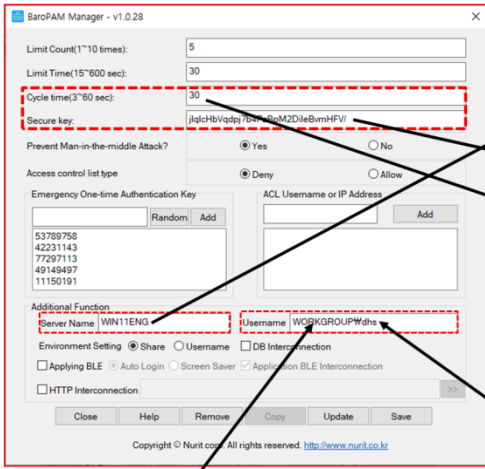
BaroPAM App Download




The BaroPAM solution is a security-optimized solution based on a Pluggable Authentication Module method that anyone can easily and directly apply to various OS and applications that require self-authentication to strengthen the security of information assets!



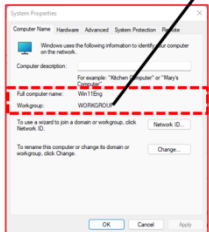
BaroPAM Manager - v1.0.28



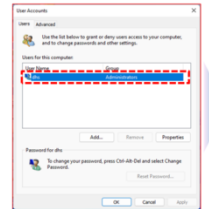
Register server information



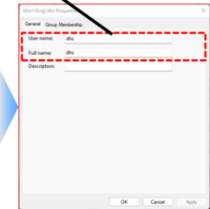
System Properties



User Accounts



User Accounts



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

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.

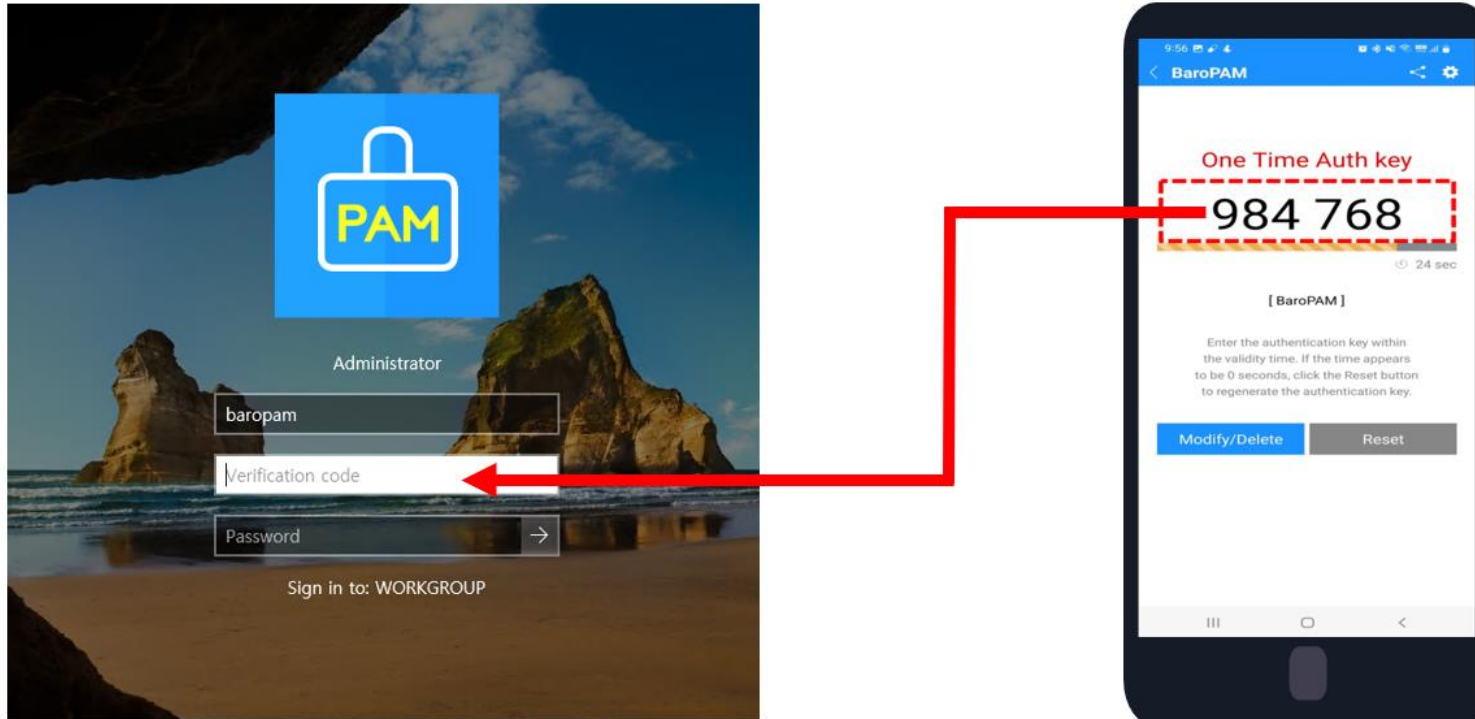
If you set the app code (kr: Korean, en: English, jp: Japanese, cn: Chinese) on the **BaroPAM** app settings -> change screen settings screen, the **BaroPAM** app changes accordingly.

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 vccredist 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

Check the log of the baropam_x64.dll module name in the application in the Windows event log with the Windows Event Viewer.

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

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

Thank You!

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