



EasyAccess2.0

EasyAccess 2.0 Startup Guide

Remotely monitor and control your HMI



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1. Overview

Traditionally, accessing a remote HMI is a convoluted job. Security concerns and tricky network parameters setup makes it difficult for many HMI users. And even with proper setup, access is still quite limited, allowing connection to only one HMI within the remote network. However, with EasyAccess 2.0, this has all changed.

EasyAccess 2.0 provides a new way for accessing an HMI from anywhere in the world. With EasyAccess 2.0, it becomes very easy to monitor and troubleshoot HMI and PLC that are at a remote location as long as Internet connection is available. As EasyAccess 2.0 already takes care of network settings and addresses security issues, the user can connect easily to the HMIs as if they were on the local network. Moreover, it is possible to have access multiple HMIs within a network.

EasyAccess is also a remote supporting service. Consider the case in which a machine builder has sold his machine with a Weintek HMI installed, and one of his oversea customers is reporting a problem, which may or may not require inspection by an engineer. He can remotely connect to the HMI through EasyAccess 2.0 to investigate the problem. The customer needs no extra network configuration, just Internet connection. In addition, he can also update the HMI project, monitor the PLC by Ethernet Pass-through, or even update the PLC program.

2. Features

- Secure connections
- Little PC setup required; no router setup required
- User friendly administrator and client UI
- Supports pass-through and proxy server

3. System Requirement and Installation

System Requirement

- PC Operation System: Windows XP, Windows 7, Windows 8 (32 / 64bit),
 Windows 10 (32 / 64bit)
 (Require Administrator privilege)
- Weintek HMI with EasyAccess 2.0 feature activated (Eligible HMI models)
- Internet Connection



EasyBuilder Pro V4.10.05 or later

• iPad: iOS 7.0 or above

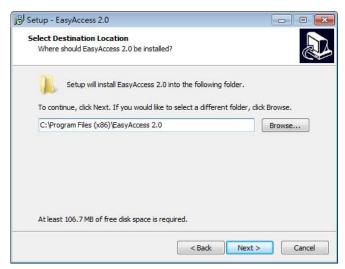
Android: V4.1.2 or above

Installation

Download the setup.exe file from EasyAccess 2.0 homepage and open it.
 Select the language for the installation process, and then click [Next].
 If there is a previous version of EasyAccess 2.0 on the PC, please remove it before installation .

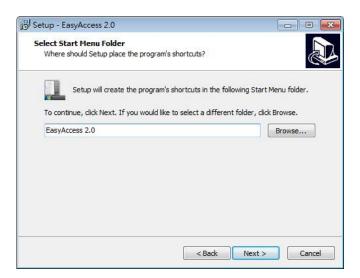


2. Select a folder for EasyAccess 2.0 installation, or use the default folder. Click [Next].

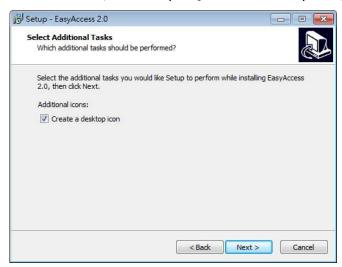


3. Select a start menu folder, or use the default folder. Click [Next].

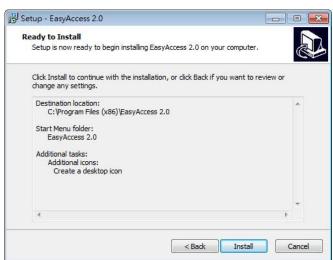




4. Select additional tasks, for example: [Create a desktop icon]. Click [Next].

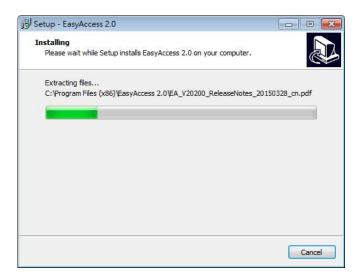


Confirm all setting. To change the setting, click [Back]. To start installation, click [Install].



6. Installation progress.





Click [Finish] to complete the installation.



Here is a list of notable files in the installation folder:

| File Name | Description |
|------------------------------|--|
| cMT Viewer | The PC application for accessing a cMT-SVR. |
| EasyAccess 2.0 | The main program used to establish remote connection to an HMI. |
| gui_30 | An essential component when using HMI Viewer to monitor a remote HMI. |
| PC Activator | Application for activating EasyAccess 2.0 for HMI on the network. |
| EA_V2xxxx_ReleaseNotes (pdf) | Release notes documenting important changes of EasyAccess 2.0 to date. |

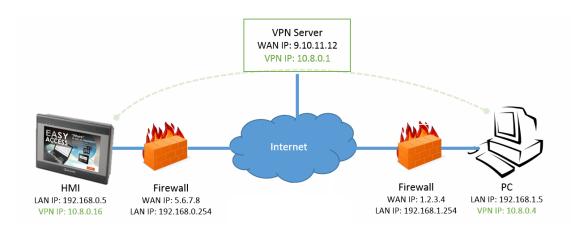


4. Getting Started

Understanding EasyAccess 2.0

EasyAccess 2.0 access technology is quite different from traditional way of remote access method. Here are some notable points:

| - 11.1 | 5 4 22 |
|---|--|
| Traditional remote connection | EasyAccess 2.0 |
| (blue links) | (green dotted links) |
| Connection traffic must pass through a number of firewalls, which means there are layers of network settings. | PC and HMI both connect to a dedicated VPN server through which data are exchanged, or by P2P. |
| Network/Router setting is mandatory; therefore, coordination with the IT department is crucial. | No additional network setting is required. |
| For one WAN IP, only one device can be connected. | For one WAN IP, multiple devices can be connected. |
| For a device behind two or more routers, connection might not be possible. | Being behind several routers does not affect EasyAccess 2.0 connectivity at all. |



EasyAccess 2.0 Network Overview



Understanding Domain, HMI Group, and User

The basic management block is Domain, under which HMIs, HMI Groups, and Domain Users exist. An HMI, upon activation, can be added to a domain.

Activation: The first step towards using EasyAccess 2.0. Each HMI has its EasyAccess 2.0 feature disabled by default, and must be activated in order to use the feature. A purchased license can be used to activate any one of the supported models; however, once an HMI has been activated, its license cannot be transferred to another HMI.

Domain and Domain Admin: The basic block of HMI management. One Domain account may contain a number of Users, HMIs and HMI groups. However, each HMI can belong to only one Domain. The Domain Administrator manages all aspects the domain through the web-based portal at (https://account.ihmi.net). Note that domain account is *not* used for logging in the EasyAccess 2.0 client program.

HMI Group: A subset of HMIs within a domain. A user in an HMI Group can access all HMI in that group. For the Domain Admin, HMI Groups provide an easy way for management of user access to HMI. An HMI can belong to more than one HMI groups.

User: A user holds the account used to login in to the EasyAccess 2.0 program. They are allowed access to HMIs for which it has direct association, and also HMIs within the group it is associated with. User's relationship with HMIs and HMI Groups are managed by the Domain Admin.

The prime principle governing HMI management in EasyAccess 2.0:

An HMI can belong to one domain only at any given time

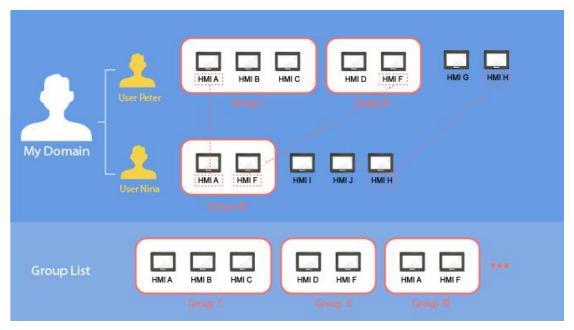


Example

Consider the following figure for an illustrative example of a domain.

- In this example, the domain, named "MyDomain" has two users, Peter and Nina.
- In this example, HMI are grouped together as Group I, Group II, Group III...etc, and one HMI belong to more than one groups. (HMI A)
- Users can belong to many groups, and have access to the HMI in the groups they belong to. (User Peter & Group I)
- Users can be directly associated with HMI and have access to them. (User Nina & HMI J)
- Multiple users can access the same HMI, whether by assignment to groups (HMI
 A) or by direct association (HMI H).

All of this is done by the Domain Admin. The Domain Admin can exercise large amount of freedom in domain management.



A sample domain "MyDomain"



Setup Checklist



Please review the following checklist to start using EasyAccess 2.0. See relevant sections describing the functions in detail.

| | Check | Relevant Section |
|---|-----------------------------------|---------------------------------------|
| ✓ | The HMI must be activated. | (5. Activate an HMI) |
| | | (16. PC Activator) |
| ✓ | The HMI must be registered in a | (6. Add an HMI to a Domain) |
| | Domain. | (7. Manage the Domain) |
| | | (16. PC Activator) |
| ✓ | The HMI must be programmed to | (8. onnect the HMI to EasyAccess 2.0) |
| | go online. | |
| ✓ | The user must have a user account | (7. Manage the Domain) |
| | which is associated with an HMI. | |
| ✓ | EasyAccess 2.0 must be installed. | (9. EasyAccess 2.0 PC client Program) |

Having all set up, the user may then initiate remote connection to the HMI!

(10. Connect to the HMI by EasyAccess 2.0)

(14. EasyAccess 2.0 on Android)

(15. EasyAccess 2.0 on iPad)



5. Activate an HMI

The HMI must have been activated in order to be connected using EasyAccess 2.0. Check its activation status on HMI in the [EasyAccess 2] tab of the [System settings] page.

Your HMI may have been activated already. If not, an HMI can be activated by one of the following means:

- Self-serve activation with activation codes on Domain web page
- Self-serve activation with activation codes on PC Activator
- Activation by Weintek's authorized dealer

Alternatively, new user could test out EasyAccess 2.0 by getting trial activation.

In either case, HMI's Hardware key will be required. Locate it in the [EasyAccess 2] tab of system setting or system register **LW-11210**.



Activation status and Hardware key



With an Activation Card

If you have an activation card, you may activate the HMI with the Activation codes printed on the card through the domain management system.



Activation Card

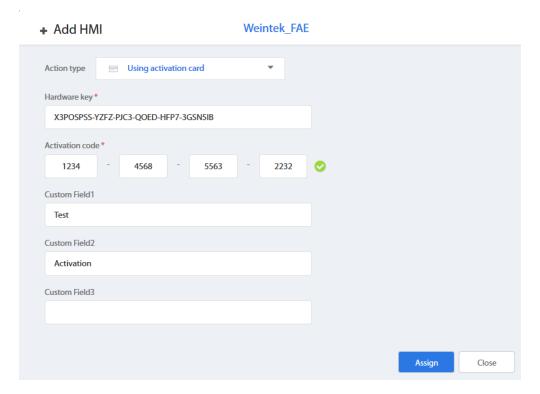
 Visit the domain management system and login to your Domain with your credential.

For the Global server, the URL is https://account.ihmi.net
For the China server, the URL is http://www.easyaccess.cn

 In [Devices] tab » [Add HMI], choose the Action type [Using activation card], and then enter the Hardware key and your Activation code.

Note: Activation by activation card will also add the HMI to the domain, in which case, steps described in <u>Chapter 6</u>. Add an HMI to a <u>Domain</u> can be skipped.





Activation by activation code

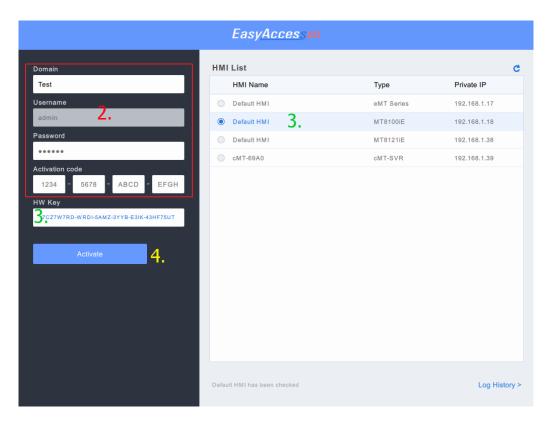
With an Activation Card on PC Activator

Alternatively, use the helper application "PC Activator" to facilitate activation process.

- 1. Run PC Activator.
- 2. Enter Domain Admin's credential and Activation code.
- **3.** From the HMI list, select the one to be activated. The HW key will be loaded to the display field.
- **4.** Depending on the HMI's current activation status, the button below will show "Activate" or "Already activated.
- 5. Click on the "Activate" button to complete activation.

Note: Support for PC activator varies among different model and OS versions. Please review <u>Ch 16</u>. <u>PC Activator</u> for information on PC Activator





PC Activator

By Hardware key through dealer

Please provide the Hardware key to your dealer for assistance.

Trial Activation

A one-time, 30 days free trial activation option is available for each HMI.

- Visit the domain management system and login to your Domain with your credential.
 - If using the Global server, the URL is https://account.ihmi.net
 If using the China server, the URL is http://www.easyaccess.cn
- 2. In [Devices] tab » [Add HMI], choose the Action type [30 days free trial], and then enter the Hardware key.

Note: The HMI will be permanently bound to the domain in which the 30 days free trial is activated. It must be activated with an activation code before it can be deleted and transferred to another domain.



6. Add an HMI to a Domain

An HMI must belong to a domain to use EasyAccess 2.0.

When an HMI is activated by activation card, it is automatically added to that domain in which it is activated. However, when an activated HMI does not currently belong to any domain, once it goes online, it will obtain a set of Session ID/Password, which can be used to add the HMI to a domain.

EasyAccess 2.0 service requires that each HMI belong to only one domain. Therefore, once an HMI is added to one domain, it cannot be added to another one. Another Domain Admin will not be able to add that HMI even with the same Session ID/Password. For an HMI to be transferred to another domain, it needs to be removed from its current domain, and then it can be added to another domain with its new Session ID/Password.

By Session ID/Password

How to find Session ID/Password?

Session ID/Password are generated uniquely for the HMI by the EasyAccess 2.0 service, the HMI must go online in order to receive this piece of information.

 First, create and download an EasyBuilder program that displays Session ID/Password (system registers [LW-10821] to [LW-10827]), and allows setting LW-10820, the connection control register.

The above setup has been made available in a demo project and the template files.

- 2. Let HMI go online by setting [LW-10820] to ON.
- 3. Once successfully connected, HMI will display the Session ID/Password.

Review <u>Chapter 8: Connect the HMI to EasyAccess 2.0 Server</u> for more information.



EasyAccess 2.0

Bypasses firewall restriction and alllows you to remotely control any PLCs via the Interne



State: Online

Error code : Success Clear

Session ID: 879628085

(-1: Error, 0: Already added in a domain, other: Ready to join)

Password: 4231

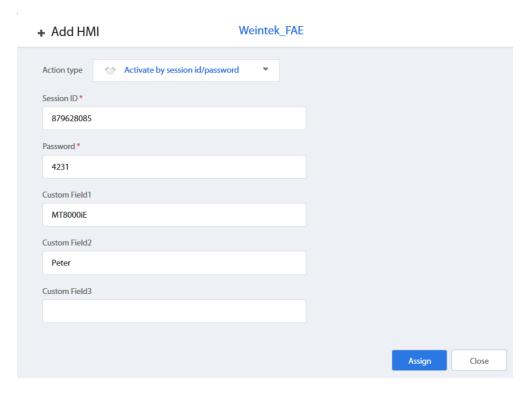
<u>Demo Project</u> showing Session ID/Password

Note: It is also possible to find out the Session ID/Password without actually downloading with EasyWatch. EasyWatch allows users to monitor the HMI or the PLC address values via Ethernet from the PC. For its usage, check out related sections in the EasyBuilder Pro User Manual.

Add to domain by Session ID/Password

In domain page, under the "Devices" tab, click "Add HMI", and then enter the Session ID/ Password and notes if needed.





Add to Domain by Session ID/Password

In PC Activator

PC Activator also facilitates the "Add to Domain" process, without needing access to the Session ID/Password. Refer to <u>16. PC Activator</u> on how to complete this process in PC Activator.



7. Manage the Domain

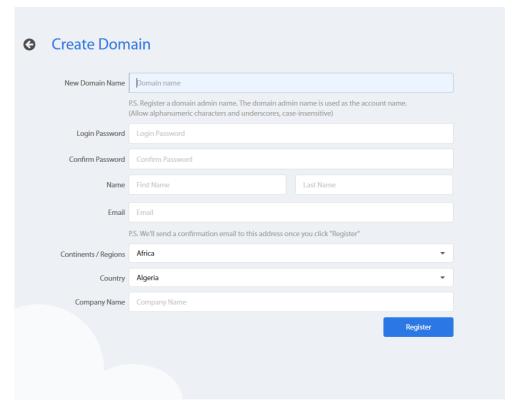
To access the domain management system,

For access of Global server: https://account.ihmi.net
For access of China server: http://www.easyaccess.cn

Note: your project setting may affect which domain to use. Please be mindful about the choice of server.

Domain Creation

Anyone can create a new domain for free. A valid e-mail address is required.

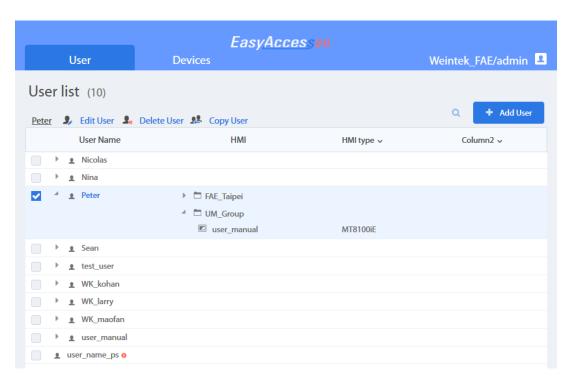


Create a Domain

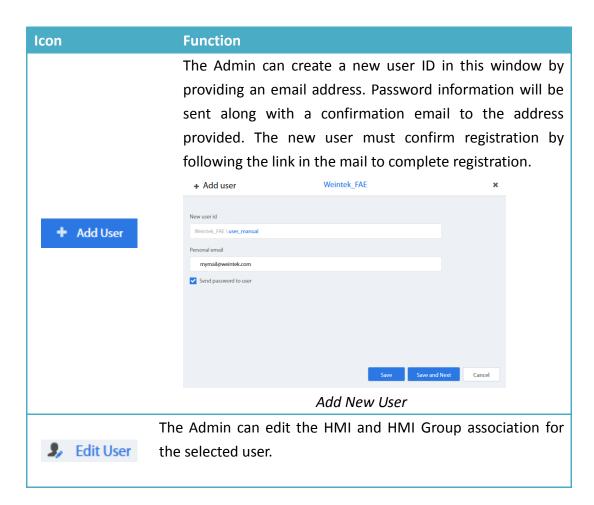
User Management

The User list displays all users and their information in the Domain. It shows whether a user is associated with any HMI and if the user belongs to any HMI group. In this page, the Admin can carry out user management actions: Add User, Edit User, Delete User, or Copy User here. For domains with a large number of users, search tool is also available.

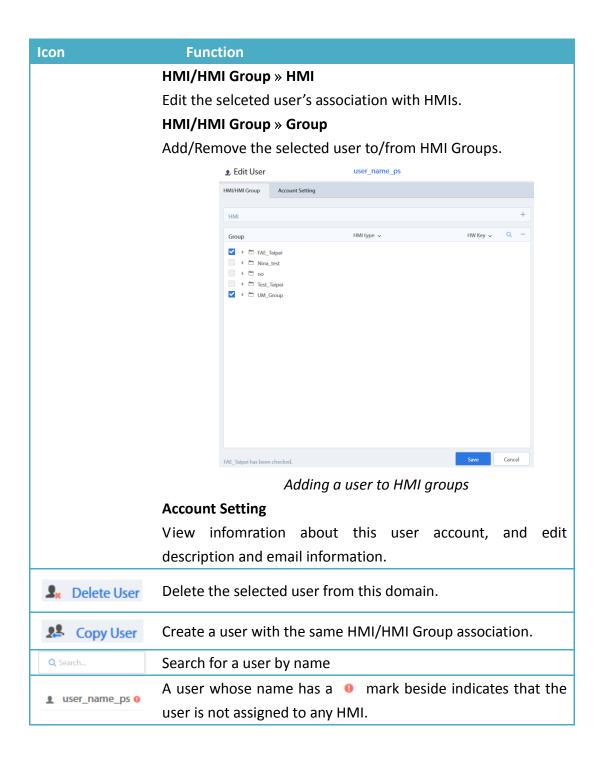




List of Users



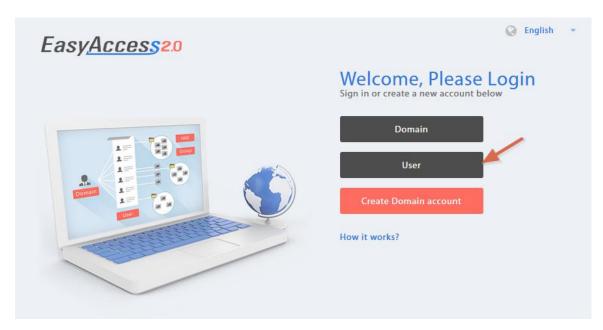




Change User Password

When the user account is first created, a default password is mailed to the registered email address. The password can be subsequently changed. To do so, visit the homepage of the domain management system and select User login. Follow the on screen guidance and change the password.

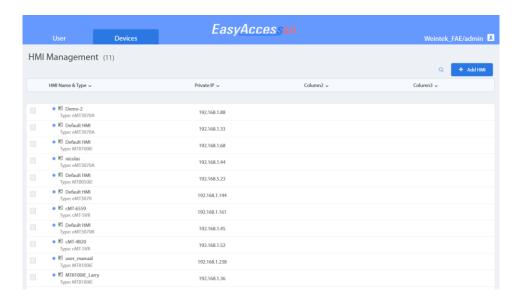




User Login

Device Management

The HMI list shows all HMIs registered in the current domain, and the HMI Group list shows all groups currently existing in this domain. The first column can sort the HMI by name, while the other columns can be set to show the following information: Private IP, Public IP, Activation Date, or Custom Field.



HMI List



| HMI Icon | Function |
|-------------------|--|
| | Add a new HMI to the domain. |
| | Action type » Using activation card |
| | Activate the HMI and add it to the current domain. |
| | Hardware key and activation code are required. |
| | Action type » activate by session id/password |
| | Add the HMI to the current domain by Session ID/Password. |
| + Add HMI | Session ID/Password is required. |
| | Action type » 30 days free trial |
| | Activate a 30-day free trial for an HMI. The HMI will be |
| | permanently bound to the domain in which the 30 days free |
| | trial is activated. Only after the HMI has been activated with |
| | an activation code will it be allowed to be deleted from the |
| | current domain and added to another one. |
| | Edit the selected HMI |
| | User/HMI Group tab » User |
| | Edit user association with the selected HMI. |
| Edit HMI | User/HMI Group tab » HMI Group |
| | Add/Remove the selected HMI from the HMI groups. |
| | Activation Information |
| | View Hardware key and other information about this HMI. |
| | Delete the selected HMI from this domain. Once deleted, |
| Delete HMI | the HMI can be added to another domain with a new session |
| | id/password. |
| Q Search Filter v | Search for HMI by name. Enabling filter function will show |
| Tillet | only assigned / unassigned or all HMI. |



| HMI Group Icon | Function |
|----------------|--|
| + Add Group | Create a new HMI group. |
| | Edit the selected HMI group |
| | HMI/User tab » HMI |
| | Add/Remove HMI from the selected group. |
| Edit Group | HMI/User tab » User |
| | Edit user association with the selected group. |
| | General Setting |
| | View information about this HMI group. |
| Delete Group | Delete the selected HMI group. |

Note: once an HMI is deleted from current domain, it can then be added to another domain. To add it back again, you will need a new set of session id/password.



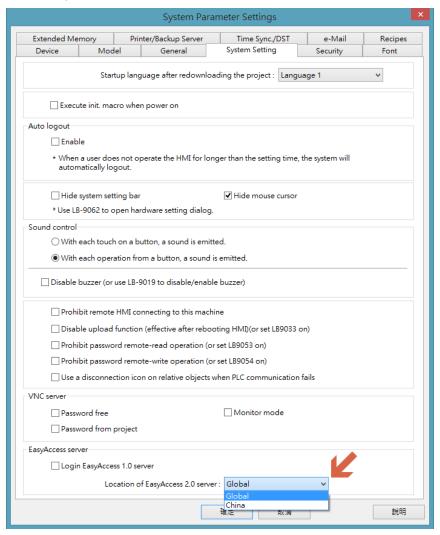
8. Connect the HMI to EasyAccess 2.0 Server

Selection of Server

In EasyBuilder Pro project, select the location of EasyAccess 2.0 server to be used. This setting is found in [System Parameter Settings]>>[System Setting] tab. Options available are: *Global* and *China*. Alternatively, use system register LW-11296 to make the selection.

Choosing the server

China and Global domains use different servers, so account and activation information in one will not match those in another. The activation codes obtained through the distributor channel in China are only valid on the China server. All others will be valid on the Global server. Choose the server based on where the HMI was originally activated, China or Global.



Selection of EasyAccess 2.0 Server



Configure EasyBuilder Pro Project

With an activated HMI, go through the following steps to connect to the EasyAccess 2.0. Ensure that this is done, implicitly or explicitly, in the project in order to use EasyAccess 2.0.

- 1. Configure the EasyBuilder Pro project. In the EasyBuilder project, the user should be able to write to LW-10820.
- 2. Write "1" to LW-10820 to go online. HMI's EasyAccess 2.0 status should be "Online". Session id/password will be displayed accordingly, depending on whether the HMI has been added to a domain.



9. EasyAccess 2.0 PC client Program

EasyAccess 2.0 is provided as a standalone program that can be installed on the PC. It can be used independent of the EasyBuilder software suite.

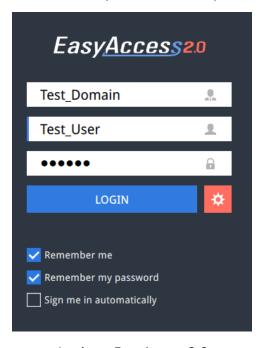
Download the software from Weintek's website at: http://www.weintek.com/globalw/Software/EasyAccess.aspx

Installing adaptors

During the first program run, the software will detect whether necessary adaptors are present. If not, they will be installed automatically.

Log in

Domain name, Domain username and password are required for login.

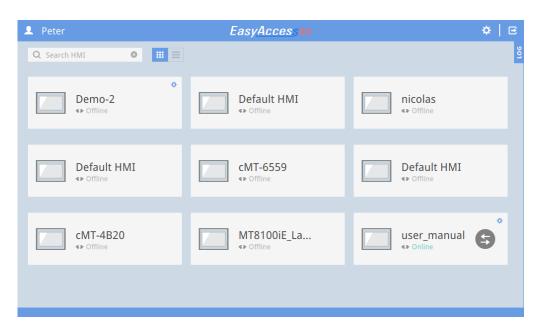


Login to EasyAccess 2.0

Main screen

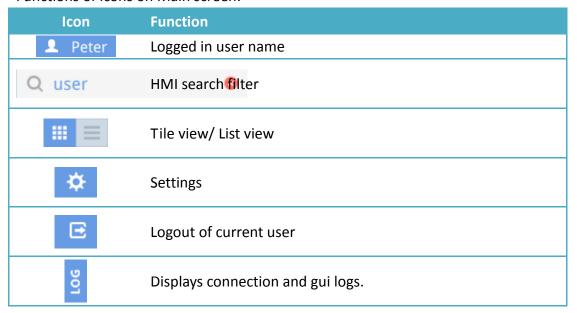
Once successfully logged in, the main screen will show all HMIs for the user and their online statuses. HMIs that are online will have a connect button and a setting button. There is no limit on the number of HMIs that can be simultaneously connected from the program. However, once an HMI is connected by a user, it goes into "occupied" state and cannot be connected by another user before the existing connection has been terminated.





EasyAccess 2.0 Main Screen

Functions of icons on Main screen:





Settings

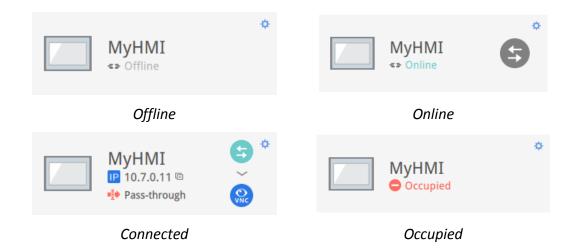
| Tab | Description | | |
|-------------------|--|--|--|
| General » | Enable/Disable traffic display under the HMI. | | |
| Network traffic | | | |
| Information | Software version and the terms of usage | | |
| Language | Select the language | | |
| | Languages available: English, French, Italian, Spanish, | | |
| | Russian, Simplified Chinese, Traditional Chinese, Korean, | | |
| | German. | | |
| Path » Executable | Select executable (*.exe) path for VNC viewer, HMI Viewer, | | |
| | and cMT Viewer, used to launch the viewers when | | |
| | connections are established. | | |
| | Settings | | |
| | General Information Language Path | | |
| | Executable VNC executable path D:/Tools/VNC-Viewer-5,2.0-Windows-64 | | |
| | HMI Viewer path | | |
| | C:/EBpro_V50102/gui_e30.exe | | |
| | cMT Viewer path C:/EBpro_V50102/cMTViewer.exe | | |
| | | | |
| | | | |
| | Ok Cancel | | |
| | VNC executable path | | |
| | Location of the .exe executable of the VNC viewer. VNC | | |
| | viewer must be installed separately. | | |
| | HMI Viewer path | | |
| | Location of the GUI (gui_e30.exe). | | |
| | cMT Viewer path | | |
| | Location of the cMT Viewer, for use with cMT-SVR. | | |

Note: Please try to keep GUI updated as it is the necessary executable for running the HMI Viewer. A copy of GUI and cMT Viewer which was most current as of the date of EasyAccess 2.0 release is included in the installation. An update of GUI may be required when programming environment of the HMI was updated; in this case, find it in the latest version of EasyBuilder Pro.



HMI States and Access Setting

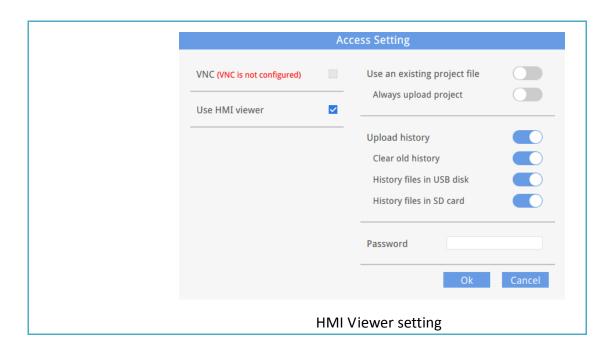
HMI can be in one of the states: Offline, Online, Connected, Occupied.



The usage or meaning of each icon:

| Icon | Function |
|--------------------------|--|
| MyHMI | HMI name |
| IP 10.7.0.6 [□] | Virtual IP address. Click to copy the IP address to clipboard. |
| Pass-through | Set up pass-through IP address |
| 4 | Connect to the HMI |
| (3) | Disconnect from the HMI |
| VNC | Access the HMI with VNC viewer (installed separately). |
| | Access the HMI with HMI Viewer |
| | Enter access setting of the HMI, which allows from using of |
| | VNC Viewer or HMI Viewer. |
| Ö | |
| ~ | To use VNC Viewer, set executable path in Settings page. |
| | To use HMI Viewer, set executable path in Settings page. |
| | Also, set how project upload and history should be handled. |



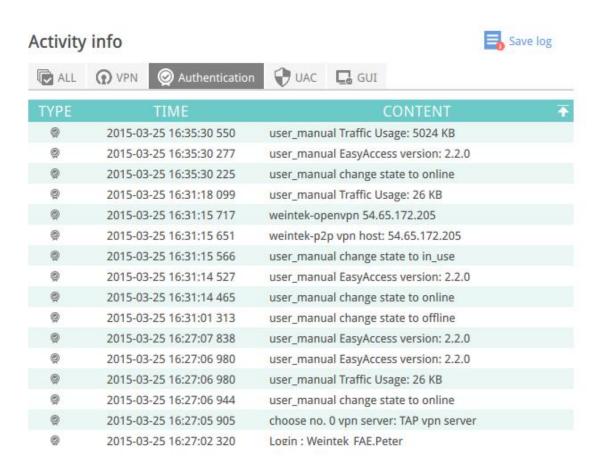


Connection Log

Clicking on the LOG icon brings out the detail connection logs with the VPN, Authentication, and UAC server. The GUI tab shows information relevant to the use of HMI Viewer. In additional to viewing them here, it is also possible to save the logs as a file.

Note: GUI is a necessary component for running the HMI Viewer

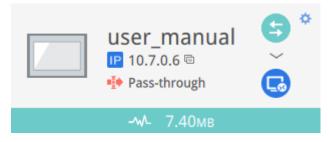




Connection Logs

Usage Display

The HMI's total data usage to date for the current month will be displayed.



Usage Display



10. Connect to the HMI by EasyAccess 2.0 on PC

Step-by-step for establishing EasyAccess 2.0 connection.



1. Launch EasyAccess 2.0.exe.



2. Enter Domain name, Domain user's username and password, and then click [Login].



3. Once logged in, the program will list user's HMIs and their statuses.



4. Click on connect button to establish connection to an online HMI. Once connected, the virtual IP address will be displayed. It is now possible to connect directly to the HMI by net services such as VNC, HMI Viewer, or FTP.

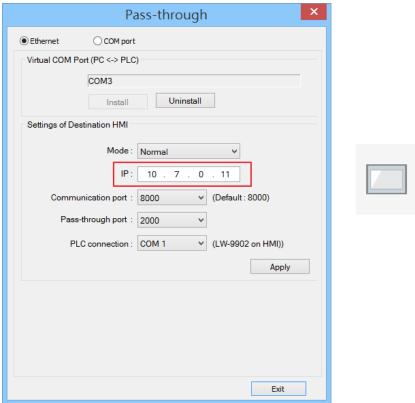


5. When finished, click on disconnect button to terminate the connection.



11. Pass-through with EasyAccess 2.0

Remote Pass-through is made possible and simple with EasyAccess 2.0. Similar to the traditional way of local pass-through, it is done with a helper program in Utility Manager. Simply enter the virtual IP address obtained in EasyAccess 2.0 in the pass-through program, as shown in the following figure. The remaining steps are the same as local pass-through. In doing remote pass-through, additional port settings are not required.



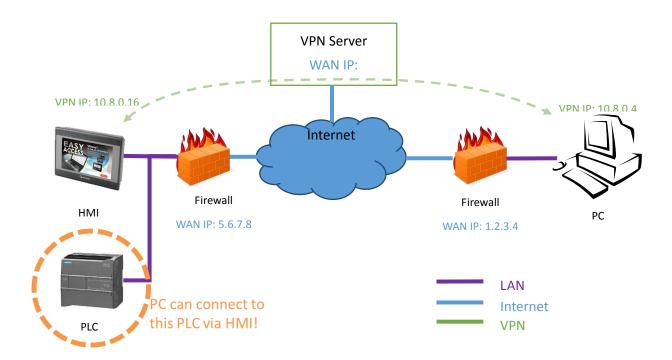


Pass-through setting in Utility Manager



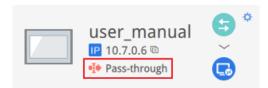
12. Pass-through Connect to a remote PLC on the HMI's network (Ethernet pass-through)

EasyAccess 2.0 not only makes possible direct connection to a Weintek HMI, but also provides pass-through function that enables the user to connect to the PLC on the remote HMI's network. Consider an EasyAccess network as shown below where a PLC is within the same LAN network as the HMI. Here, the PC, by first establishing EasyAccess 2.0 connection to the HMI, may use the HMI as the relay and connect to the PLC as well.



How to setup pass-through to PLC?

 On the list of HMI, click on the "Pass-through" icon which appears below the IP address when connection in active.



2. Enter the IP address of the target PLC.





3. Once connected, the IP address of the PLC will be shown. The user may now launch the PLC program.



If the remote PLC and the local computer have the same private IP address range, a warning will appear, indicating that subsequent connection to the PLC's IP address will be directed to the remote device instead of the local device if there is any.



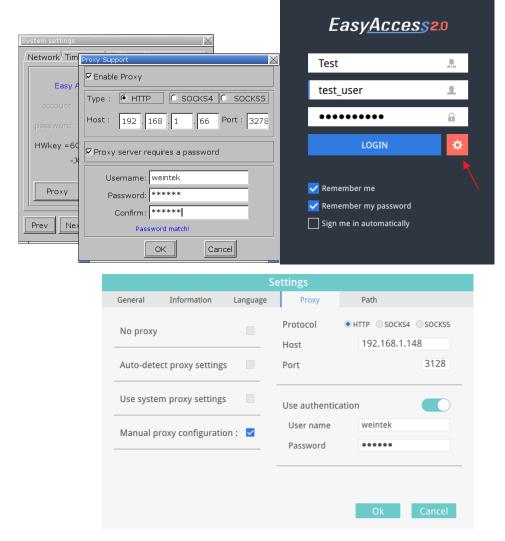
This will override connection to 192.168.1.20 to remote device. You see this message because the IP address (192.168.1.20) is in your local network (192.168.1.0/255.255.255.0).



13. Proxy Server

A proxy server acts as an intermediary between clients and servers. In some network infrastructure, especially that of a large scale, proxy servers are used to ensure security, administrative control, and efficiency of the network. To establish connection with EasyAccess 2.0 through proxy, however, requires additional settings in EasyAccess 2.0 client program and/or the HMI.

Proxy settings at PC's EasyAccess 2.0 client side and HMI side are similar. On PC, proxy setting window can be called from the setting button of the login screen. On HMI it is found in the [EasyAccess 2 tab] of system settings. Enter the proxy type, host address, port number and login credentials obtained from the network administrator.



Proxy Settings



Proxy related system tags

The following table lists the system tags reserved for EasyAccess 2.0 proxy settings:

| LW-11170 (16bit) | Proxy Disable/Enable (0: disable, 1: enable) |
|----------------------------|--|
| LW-11171 (16bit) | Proxy Type (0: HTTP, 1: SOCKSv4, 2: SOCKSv5) |
| LW-11172 (16bit) | Proxy Server IPO |
| LW-11173 (16bit) | Proxy Server IP1 |
| LW-11174 (16bit) | Proxy Server IP2 |
| LW-11175 (16bit) | Proxy Server IP3 |
| LW-11176 (16bit) | Proxy Server Port |
| LW-11177 (16bit) | Proxy authentication (0: disable, 1: enable) |
| LW-11178 (16 words) | Proxy username |
| LW-11194 (16 words) | Proxy password |



14. EasyAccess 2.0 on Android

EasyAccess 2.0 is available for Android devices. With EasyAccess 2.0, users can easily use VNC or cMT Viewer to access remote HMI. Even though the UI and available functionalities on an Android device maybe slightly different from PC, the connection steps are as simple and straighforward.

EasyAccess 2.0 on Android requires Android version 4.1.2 or later.

App Download

In addition to the main app EasyAccess 2.0, a helper OpenVPN Connector app is required. Please download the apps from the App store and install the apps, both of which are free.

| Icon | App Name | App Provider |
|------|-------------------------------|---------------------|
| | EasyAccess 2.0 | Weintek Labs., Inc, |
| | EasyAccess 2.0 OVPN Connector | Weintek Labs., Inc. |

Step-by-step connection guide



Launch EasyAccess 2.0 app.



2. Enter Domain name, Domain user's username and password, and then click [Login].



3. Once logged in, the app will list user's HMIs and their statuses.



4. Click on the connect button to establish connection to an online HMI."



5. Once connected, the virtual IP address will be displayed. The top status bar will also display a VPN icon. It is now possible to connect directly to the remote HMI by VNC or cMT Viewer.







6. When finished, return to EasyAccess 2.0 app and click on the disconnect button to terminate the connection.



15. EasyAccess 2.0 on iPad

EasyAccess 2.0 is available on iOS for iPad. With EasyAccess 2.0, users can easily use VNC or cMT Viewer to access remote HMI. However, due to software restrictions, connection steps are slightly different from those on PC.

EasyAccess 2.0 on iPad requires iOS version 7.0 or later.

Download from the app store

In addition to the main app EasyAccess 2.0, OpenVPN Connect app is required. Please download the apps from the App store and install the apps, both of which are free.

| Icon | App Name | App Provider |
|------|-----------------|----------------------|
| | EasyAccess 2.0 | Weintek Labs., Inc. |
| n | OpenVPN Connect | OpenVPN Technologies |

Step-by-step connection guide



1. Launch EasyAccess 2.0 app



2. Enter Domain name, Domain user's username and password, and then click [Login].



3. Once logged in, the program will list user's HMIs and their statuses.



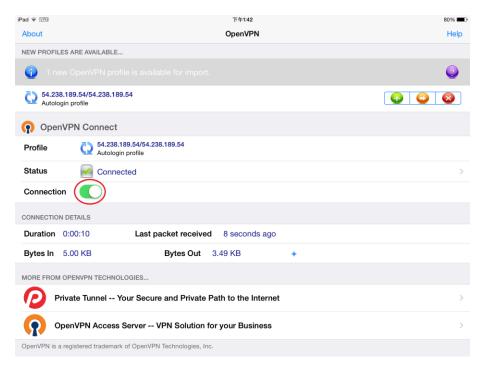
4. Click on connect button to establish connection to an online HMI. Dialogue will show with action buttons. Click "Open in OpenVPN."







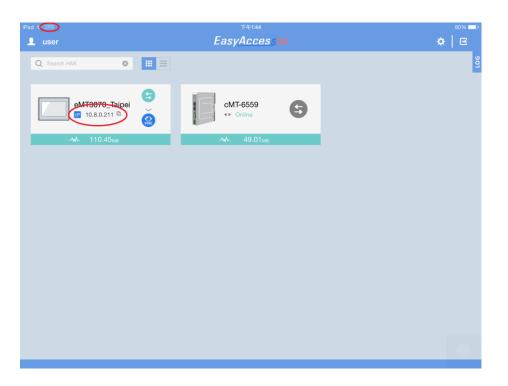
In OpenVPN app, add the login profile, and toggle the connection button to initiate connection.





6. Once connected, return to EasyAccess 2.0 app and the virtual IP address will be displayed. The top status bar will also display a VPN icon. It is now possible to connect directly to the remote HMI by VNC or cMT Viewer.







7. When finished, click on disconnect button to terminate the connection.



16. PC Activator

The PC activator allows the user to quickly perform HMI activations, which would otherwise have to be done through the web interface. Instead of the often lengthy process of recording and typing hardware keys for activation, with PC Activator, the user now can quickly search for HMI's that are on the network, check their activation statuses, and activate them with the activation code. This is especially useful for bulk activation. In addition, PC Activator also lets users add HMI to a domain without having access to the session ID/ password.

Two main feature are supported by the PC Activator

- 1. HMI activation by activation code
- 2. Adding an HMI to a domain

Activation



1. Enter Domain name, password, and activation code

0

2. Select an HMI from the HMI list. It is possible to activate ones with a

icon. Its hardware key will be retrieved and shown.

List of icon:

☑: HMI is activated and assigned to a domain.

: HMI is activated but **not** assigned to a domain.

: HMI is not activated. It can be activated in PC Activator

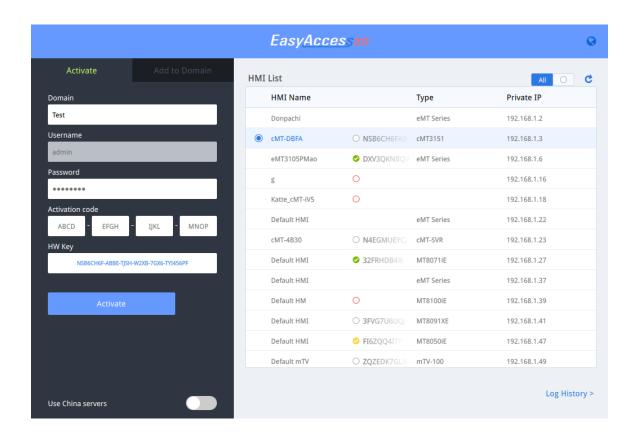
O: HMI's OS version does not support PC Activator. OS upgrade may solve this problem.

no icon: HMI does not support PC Activator.

Activate 3.

Click the Activate button.





By toggling the option "Use China servers", PC Activator will check the activation status and perform activation with China servers (http://www.easyaccess.cn). Account information registered on global servers cannot be used on China servers, and vice versa.

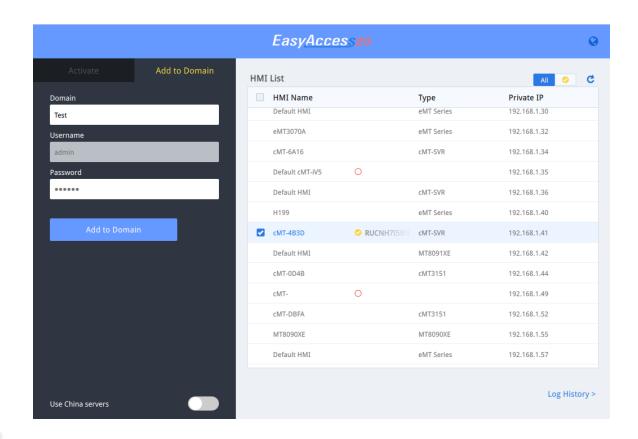
Add to Domain

PC Activator also allows the user to Add an HMI to Domain directly without explicitly having gained access to the Session ID/Password. Simply enter the Domain name and admin password, and then select an HMI that can be added.

HMI with an icon of , indicating that it has been activated but **not** assigned to a domain yet, can be selected and added to the Domain.

By toggling the option "Use China servers", PC Activator will check the activation status and perform activation with China servers (http://www.easyaccess.cn). Account information registered on global servers cannot be used on China servers, and vice versa.





OS Support

HMI and OS that supports PC Activator (current as of January 2016)

| Model | OS version or later |
|------------------------------|---------------------|
| eMT3070A | TBA |
| eMT3070B | 20150603 |
| eMT3105,eMT3120, eMT3150 | TBA |
| MT8070iE, MT8100iE | 20150508 |
| MT8050iE, MT8071iE, MT8101iE | 20150527 |
| MT8090XE, MT8091XE | 20150603 |
| MT8121XE, MT8150XE | 20150603 |
| mTV-100 | 20150508 |
| cMT-SVR | 20151127 |



17. Frequently Asked Questions

Q: My HMI is broken down and I am sending back my machine for repair. Can I use my old EasyAccess 2.0 license on my replacement machine?

A: Please contact us by service request on our website.

Q: I cannot activate while using PC Activator. HW Key text field is showing "Not Supported."

A: Please check the HMI's OS and refer to *16 PC Activator* for the list of PC Activator - supported model and OS version.

Q: I do not see the EasyAccess 2 tab.

A: Please check the HMI's OS and refer to 18_References_for the list of EasyAccess 2.0 - supported model and OS version.

Q: On the EasyAccess 2 tab, it says "connect to the server fails?" in red.

A: The HMI cannot connect to the internet. Please make sure Internet access is available to the HMI. Check the IP address, Gateway, and DNS address settings. If the HMI has an OS version prior to 20140814, you might see this message too. This indicates that security certificate on the HMI has expired and cannot work with the EasyAccess 2.0 server. In order to use EasyAccess 2.0 again, you must update the certificate manually. The update procedure is as follows:

- With the latest EasyBuilder Pro, download the EasyAccess 2.0 <u>Demo project</u> (or any project which allows LW-10820 to be set to 1) to the HMI. When downloading, make sure EasyAccess 2.0 checkbox is ticked.
- 2. On the HMI, click the "connect" button (or set LW-10820 to 1); security certificate update will begin.
- 3. Check the activation status again in the system information page.

Q: I notice that VPN IP address can change between sessions. Is it normal?

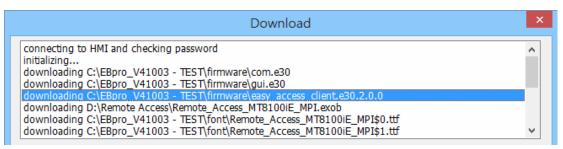
A: Yes, it is perfectly normal. EasyAccess 2.0 connections are established on demand, so VPN IP address may change. Also, on PC or Android device, IP address starting with 10.8 denotes a connection made in point-to-point (P2P) mode as opposed to VPN mode. In general, P2P mode allows higher data rate than VPN does. The program will determine the proper mode to use based on current network conditions.



Q: When I try to connect to EasyAccess 2.0 by setting LW-10820, nothing happens.

A: There are many possibilities, here is the list for a few of them:

 Please make sure that EasyAccess client program is in the HMI. It should have been downloaded to the HMI during project download. If not, check the version of EasyBuilder Pro used and whether easy_access_client.e30 is in the firmware folder.



2. The time setting of HMI may be incorrect. If time setting on HMI vastly different from the current time, its security certification will be considered expired and connection will fail.

Q: How do I update EasyAccess 2.0? Do you provide regular updates?

A: Yes, Weintek will provide feature and bug fixing updates on a regular basis. For the latest PC, iOS, Android software, please download from our website, the App Store, and Google Play Store, respectively.

HMI's EasyAccess client program is updated when you download any new program with EasyBuilder Pro. When EasyBuilder Pro detects that HMI has an EasyAccess 2.0 client program older than the one bundled to that EasyBuilder Pro version, it will download and update the one in HMI automatically.

Q: I've just updated my OS to the latest release, but my activation disappeared. Do I have to re-activate?

A: In the EasyAccess 2 tab, click on the [Refresh] button. EasyAccess 2.0 will be re-activated if the same HMI was previously activated.

Q: I'm using Windows 8 and the SmartScreen warns that running the software may put my PC at risk.

A: If you obtained our software from the official channel, either directly from us or from a trusted dealer, you can rest assured that the software is safe. Click on "More info", and then "Run Anyway" to continue.

Q: When I run EasyAccess 2.0 on PC, I see weird graphic display like white dots



everywhere and missing words.

A: Your PC may not have full support of graphic rendering method used by EasyAccess 2.0 client program. Run a program "Display Settings" to select the one that gives the best rendering result.



18. References

System Parameters

| Restriction | Description |
|---|---|
| Data Rate and Usage Limit | Data rate at 100 kB/s for the first 1GB and 5 kB/s after. Usage count restarts on the 1st day of each calendar month. |
| # of Domain an HMI can be registered in | 1 |
| # of users an HMI can be connected by at a time | 1. See "Occupied" status in Appendix. |
| # of HMI a user can connect to at a time | Unrestricted |
| Service Port | HTTPS port (443) |
| Ethernet-Ethernet Pass-through | 1 IP |

Model and OS Support

HMI OS versions that support EasyAccess 2.0

| Model | OS version or later |
|------------------------------|---------------------|
| eMT3070A | 20140624 |
| eMT3070B | All versions |
| eMT3105,eMT3120, eMT3150 * | 20140701 |
| MT8070iE, MT8100iE | 20140626 |
| MT8050iE, MT8071iE, MT8101iE | 20140624 |
| MT8090XE, MT8091XE | All versions |
| MT8121XE, MT8150XE | 20140624 |
| mTV-100 | 20140815 |
| cMT-SVR | 20140715 |

^{*} EasyAccess 2.0 is not available for eMT3105, eMT3120 and eMT3150 shipped prior to June, 2012.



19. Appendix

Terminalogy

(Online Status) Online:

When an HMI goes on-line, it sends keep-alive information to keep-alive server and lets all EasyAccess 2.0 clients know it is ready for connection. There is still no connection in this state unless one EasyAccess 2.0 client connects to it.

(Online Status) Occupied:

When an EasyAccess 2.0 client connects to the HMI, then the HMI is **occupied** and no other EasyAccess 2.0 client can connect to it until it is disconnected.

EasyBuilder Pro System Tags

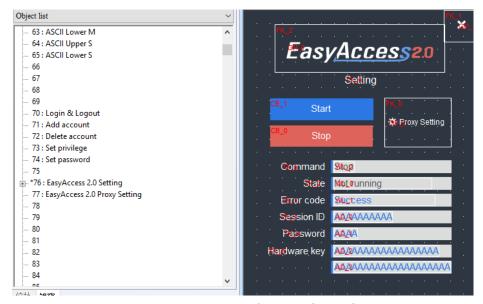
A number of system tags are added to EasyBuilder Pro for exclusive use of EasyAccess 2.0.

| System Tag | Function |
|------------------|--|
| | Connect/Disconnect EasyAccess 2.0 |
| LW-10820 (16bit) | 0: Disconnect |
| | 1: Connect |
| | EasyAccess 2.0 Online Status |
| | 0: Disable |
| LW-10828 (16bit) | 1: Offline |
| LW-10828 (16011) | 2: Online |
| | 3: Occupied |
| | 4: Download client update |
| | Error code provides information about error status while the |
| | HMI is going online on EasyAccess 2.0. |
| | 0: Success. |
| | (Connection successful) |
| LW-10829 (16bit) | 1: Not activated. |
| | (EasyAccess 2.0 function is not activated on the HMI) |
| | 2: Log-in timeout |
| | (Outbound connection is broken or the server is down) |
| | 3: Certificate expired |



| (License Key has expired. Please check with distributor.) 4: HMI client not ready (Open and close client too frequently) 5: HMI client will update (Update is downloaded and ready) 6: HMI client does not exist (Client program does not exist in HMI memory) LW-10821 (5words, ASCII) LW-10826 (2words, ASCII) LW-11210 (20words) LW-11210 (20words) LOcation of EasyAccess 2.0 server 0: Global 1: China | | |
|---|-----------------|--|
| (Open and close client too frequently) 5: HMI client will update (Update is downloaded and ready) 6: HMI client does not exist (Client program does not exist in HMI memory) LW-10821 (5words, ASCII) LW-10826 (2words, ASCII) LW-11210 (20words) LW-11296 (16bit) O: Global | | (License Key has expired. Please check with distributor.) |
| 5: HMI client will update (Update is downloaded and ready) 6: HMI client does not exist (Client program does not exist in HMI memory) LW-10821 (5words, ASCII) LW-10826 (2words, ASCII) LW-11210 (20words) LW-11296 (16bit) C: Global | | 4: HMI client not ready |
| (Update is downloaded and ready) 6: HMI client does not exist (Client program does not exist in HMI memory) LW-10821 (5words, ASCII) Session ID. This is used to add an HMI to a Domain. CW-10826 (2words, ASCII) LW-11210 (20words) Hardware Key Location of EasyAccess 2.0 server O: Global | | (Open and close client too frequently) |
| 6: HMI client does not exist (Client program does not exist in HMI memory) LW-10821 (5words, ASCII) LW-10826 (2words, ASCII) LW-11210 (20words) LW-11296 (16bit) C: Global | | 5: HMI client will update |
| (Client program does not exist in HMI memory) LW-10821 (5words, ASCII) LW-10826 (2words, ASCII) LW-11210 (20words) LW-11296 (16bit) CClient program does not exist in HMI memory) Session ID. This is used to add an HMI to a Domain. Hardware Key Location of EasyAccess 2.0 server CClient program does not exist in HMI memory) LW-10821 Session ID. This is used to add an HMI to a Domain. | | (Update is downloaded and ready) |
| LW-10821 (5words, ASCII) LW-10826 (2words, ASCII) LW-11210 (20words) LW-11296 (16bit) Session ID. This is used to add an HMI to a Domain. Session Password. This is used to add an HMI to a Domain Hardware Key Location of EasyAccess 2.0 server O: Global | | 6: HMI client does not exist |
| Session ID. This is used to add an HMI to a Domain. LW-10826 (2words, ASCII) LW-11210 (20words) Hardware Key Location of EasyAccess 2.0 server (16bit) O: Global | | (Client program does not exist in HMI memory) |
| (5words, ASCII) LW-10826 (2words, ASCII) LW-11210 (20words) Hardware Key Location of EasyAccess 2.0 server (16bit) O: Global | LW-10821 | |
| (2words, ASCII) LW-11210 (20words) LW-11296 (16bit) Session Password. This is used to add an HMI to a Domain Hardware Key Location of EasyAccess 2.0 server 0: Global | (5words, ASCII) | Session ID. This is used to add an HMI to a Domain. |
| (2words, ASCII) LW-11210 (20words) Hardware Key Location of EasyAccess 2.0 server (16bit) 0: Global | LW-10826 | |
| (20words) Hardware Key Location of EasyAccess 2.0 server (16bit) 0: Global | (2words, ASCII) | Session Password. This is used to add an Hivil to a Domain |
| LW-11296 (16bit) Location of EasyAccess 2.0 server 0: Global | LW-11210 | Handriage Ver |
| (16bit) 0: Global | (20words) | Hardware Key |
| (16bit) 0: Global | | |
| | LW-11296 | Location of EasyAccess 2.0 server |
| 1: China | (16bit) | 0: Global |
| | | 1: China |

Note: Demo pages using these system registers have been added to the template file in EasyBuilder Pro. Look for them when opening a new file to save time in your project design. Refer to Appendix for an example.



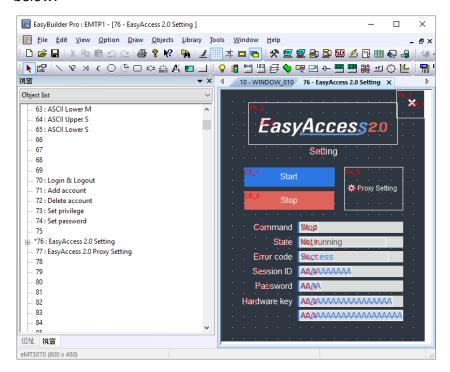
EasyAccess Page in the Template File



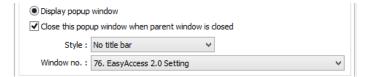
Example for preparing EasyAccess 2.0 page

Here are the steps for preparing EasyAccess 2.0 page from the new template file in EasyBuilder Pro.

 Create a new project using templates, and you can see window #76 as below:



2. In window #10, add a [Function Key] object to popup window #76.



- 3. Download the project to HMI.
- 4. On HMI, click the [Function Key] object which was just added.
- 5. Click "Start" button.
 If the network setting of the HMI is correct, the state will be online like the following:



