

MONITOUCH

Web Machine Interface

Contents

1 VPN Remote Access Service



Hakko Electronics Co., Ltd.

Record of Revisions

Reference numbers are shown at the bottom left corner on the back cover of each manual.

| Date | Reference No. | Revised Contents |
|----------------|---------------|------------------|
| February, 2015 | 1075NE0 | First edition |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

1 VPN Remote Access Service

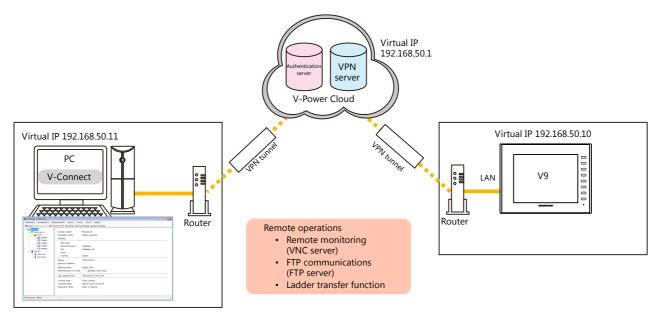
| 1.1 | Overviev | N | 1-1 |
|-----|-----------|------------------------------|-----|
| | 1.1.1 | VPN Remote Access Service | |
| | 1.1.2 | Applicable Models | |
| | 1.1.3 | License | |
| 1.2 | VPN Cor | nnection Sequence | 1-4 |
| 1.3 | V-Conne | ect Management Tool | |
| | 1.3.1 | Operating Environment | |
| | 1.3.2 | User Types and Privileges | |
| | 1.3.3 | Installation | |
| | 1.3.4 | V-Connect Configuration | |
| | 1.3.5 | Domain | |
| | 1.3.6 | Connection | |
| | 1.3.7 | Access Points | |
| | 1.3.8 | Users | |
| | 1.3.9 | View | |
| | 1.3.10 | Tool | |
| | 1.3.11 | Help | |
| 1.4 | V9 Series | s Unit Settings | |
| | 1.4.1 | IP Address Settings | |
| | 1.4.2 | Date and Time Settings | |
| | 1.4.3 | VPN Settings | |
| | 1.4.4 | VPN Connection/Disconnection | |
| 1.5 | Routing | Function | |
| | 1.5.1 | Overview | |
| | 1.5.2 | Notes on Connections | |
| 1.6 | Errors | | |

1 VPN Remote Access Service

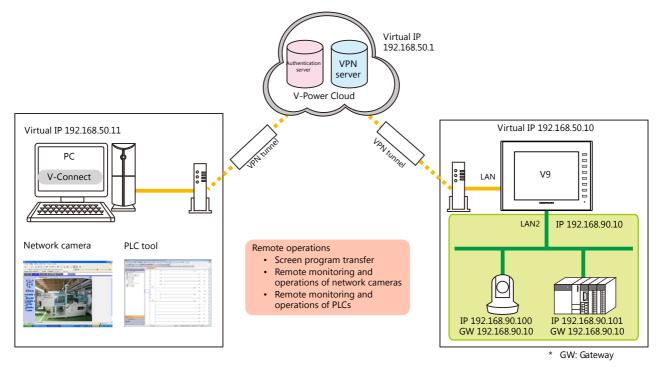
1.1 Overview

1.1.1 VPN Remote Access Service

- Easily enables remote access using V-Power Cloud (VPN server/authentication server) and V-Connect (management tool) that are prepared by Hakko Electronics.
- Configurable by simply preparing an Internet-connected environment.
- Prepare an environment that can perform communications using encryption protocols including HTTPS. There may be severe restrictions on the use of encrypted communications in your country or region. Operation is not guaranteed in such countries or regions.
- · Supports SSL-VPN to ensure safe remote access without any risk of eavesdropping or manipulation.



• Routing function (LAN2CH/3CH types only) Because the V9 series unit features a built-in routing function, devices on the local network can also be accessed.



• Remote operations available when connected to a VPN Remote operations are performed using the relevant software.

| Remote Operation | Relevant Software |
|---|---|
| Screen program transfer | V-SFT-6 |
| Remote monitoring and operation of V9 series units (VNC server function) | VNC client tool |
| FTP communications (FTP server function) | FTP client tool |
| Remote monitoring and operation of PLCs connected via serial connection to V9 series units (ladder transfer function) | LadderComOp PLC ladder tool |
| Remote management of V9 series units | TELLUS and V-Server (under development) |
| Remote monitoring and operation of network cameras on the local network where the V9 series unit is located | Network camera tool |
| Remote monitoring and operation of PLCs on the local network where the V9 series unit is located | PLC ladder tool |

1.1.2 Applicable Models

The VPN remote access service can be used with the following versions and ports. For older versions, perform an OS and system updates as required.

| V9 | V9 Series Unit Version | | VPN Connection Port * | | | |
|-------------|------------------------|-------------------------|-----------------------|------|------|--------|
| | OS | SYSTEM | LAN | LAN2 | WLAN | CUR-03 |
| V9 Advanced | | | 0 | 0 | 0 | × |
| V9 Standard | Ver. 1.10 or higher | Ver. 1.060 or higher | 0 | 0 | 0 | Х |
| V9 Lite | | | 0 | - | - | Х |

* Only one port is used for VPN connection. The other ports are used to connect to the local network.

1.1.3 License

A license must be purchased in order to use the VPN remote access service.

The following table lists the license types and available number of access points and VPN terminal registrations.

| Item | | License | | | | |
|----------------------------|-------|--------------------|-------|--------|-----------|-----------|
| | | Free ^{*1} | Value | Simple | Wide | Extra |
| Access points *2 | | 1 | 1 | 1 | Unlimited | Unlimited |
| VPN terminals (V9) | | 5 | 10 | 30 | 100 | Unlimited |
| Number of registered users | | 20 | 20 | 20 | 20 | 20 |
| | 1:1 | | | | | |
| Connection | 1:n | 0 | 0 | 0 | | |
| type *3 | 1:n:m | | 0 | 0 | 0 | 0 |
| | n:n | × | | | | |

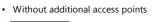
*1 A free license can be registered using the "V-Connect" management tool. The free license provides 30 days of use from the date of registration free of charge. To continue use after 30 days, switch to a paid license.

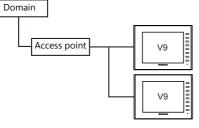
Switch to a paid license by downloading the application form for a paid Web Machine Interface license, entering the required information, and submitting the form to your local retailer.

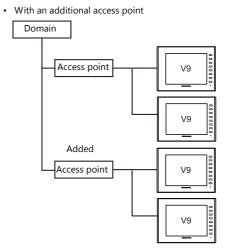
http://monitouch.fujielectric.com/site/support-e/download-index-01.html

| Users - Owned - Developed | ≫ Products ≫ Support ≫ FAQ | ≫ Distributors |
|--|---|---|
| Home > Support > Download | | |
| Support | Download | |
| Connectable Equipment | About Download | |
| PLC Temperature Controllers | >> V-SFT Member's Only | >> V-Connect Member's Only |
| Recommended Peripheral Equipment | MONITOUCH screen configuration software V-SFT and related files can be downloaded. >Information on version update | Download a management tool for Web Machine Interface (VPN remote access). >> Application form |
| List of Compatible Bar-code Readers | V-SFT Ver.5 V-SFT Ver.5 V-SFT Ver.5 | Click here for license application form. |
| List of Recommended CF Cards | V-SFT Ver.2 | Click here for a terms of service. |
| List of compatible printers | > Improvement information V-SFT Ver.6 | |

*2 Access points



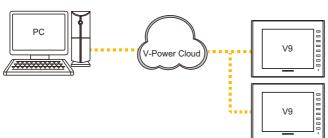




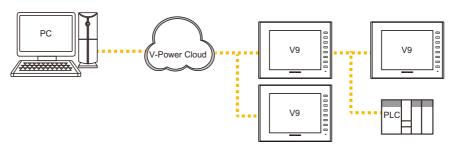
*3 Connection type



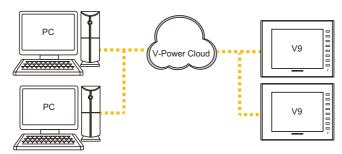
- 1:n



- 1:n:m



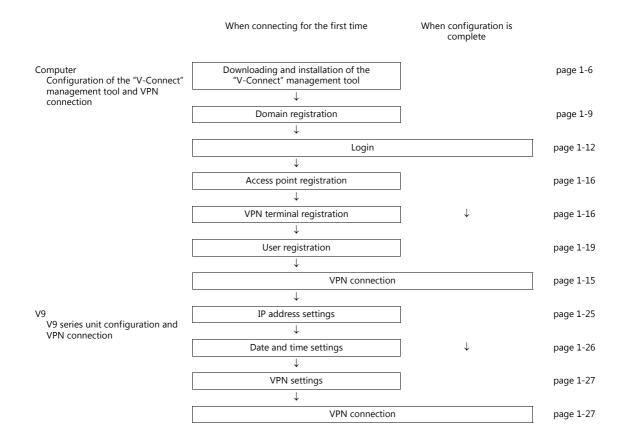
- n:n



1

1.2 VPN Connection Sequence

The sequence of configuration for connecting a computer and V9 series unit to the VPN is shown below. The "V-Connect" management tool (Ver. 1.1.0.0) must be installed on the computer.



1.3 V-Connect Management Tool

1.3.1 Operating Environment

Make sure that your system meets the following system requirements before starting V-Connect (version 1.1.0.0).

| Computer | PC/AT compatible computer running Windows | |
|--------------------|--|--|
| OS * | Windows 7 (32-bit, 64-bit) / 8 (32-bit, 64-bit) / 8.1 (32-bit, 64-bit) | |
| CPU | Min. 1.0GHz | |
| Memory | Min. 1.0 GB for 32-bit, min. 2.0 GB for 64-bit | |
| Hard disk | At installation: Min. 1.0 GB for 32-bit, min. 2.0 GB for 64-bit | |
| Display resolution | 1024 × 768 dots (XGA) or higher | |
| Display colors | High color (16-bit) or higher | |

* Administrator privileges are required for installation.

Software Copyrights

- The software as well as its copyright and any other copyrights and rights related to the software are property of Hakko Electronics Co., Ltd.
- The software may not be used or copied, whether in whole or in part, without permission of Hakko Electronics Co., Ltd.
- The specifications and components of the software are subject to change without prior notification.
- Hakko Electronics Co., Ltd. bears no responsibility for any results of using the software.
- · Windows is a registered trademark of Microsoft Corporation in the United States.
- All other product names are trademarks or registered trademarks of their respective holders.

Notes on Usage

• The software may not be correctly installed if resident programs and applications such as an antivirus program are running. Be sure to close all applications before installing the software.

1.3.2 User Types and Privileges

The following table lists the types of users that can operate V-Connect and the corresponding user privileges.

| Item | | | User Type and Privileges | | | |
|---------------|---|----------------------|--------------------------|-------------|--|--|
| | Item | Domain Administrator | Administrator | Normal User | | |
| Domain | Register domain | | × | × | | |
| | Modify Domain | | ~ | | | |
| Connection | Connect VPN | | | 0 | | |
| | Disconnect VPN | | | | | |
| Access points | New access point | | 0 | | | |
| | Delete access point | | | × | | |
| | Modify access point | | | | | |
| User | New user | | | | | |
| | Delete user | | 0 | × | | |
| | Modify user | 0 | *1 | | | |
| | Change user password | | | | | |
| View | Show domain | | | 0 | | |
| | Refresh | | | | | |
| | Log info (for management) | | | × | | |
| | Log information (for VPN connection) | _ | 0 | 0 | | |
| Tool | Proxy settings | | | | | |
| | Option settings | | | 0 | | |
| Help | About | | | | | |

*1 Registration, deletion, and modification of other administrator accounts and modifying the privileges of normal users cannot be performed.

1.3.3 Installation

Procedure

Example: Windows 7

- Download the "V-Connect Ver. 1.1.0.0" management tool from the Hakko Electronics website. URL: http://monitouch.fujielectric.com/site/support-e/download-index-01.html
 - * User registration is required to download the software.



2. Double-click on the downloaded file to start the installation process.

| V-Connect Setup | |
|-----------------|--|
| | Welcome to the V-Connect Setup Wizard This wizard will guide you through the installation of V-Cornect. It is recommended that you close all other applications before starting Setup. This will make it possible to update relevant system files without having to reboot your computer. |
| R | Click Next to continue. |
| | Next > Cancel |

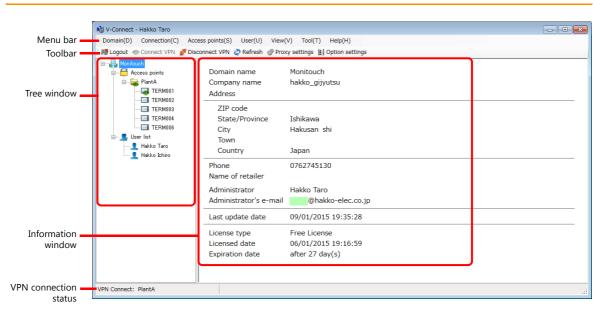
3. Proceed according to the displayed instructions and when the [Installation Complete] window appears, click [Close].

| P V-Connect Setup | - • × |
|--|--------------|
| Installation Complete Setup was completed successfully. | 6 |
| Completed | |
| Show details | |
| | |
| | |
| | |
| Hakko Electronics Co., Ltd | Close Cancel |

This completes the installation procedure. The software can be started from the Start menu.

1.3.4 V-Connect Configuration

Names of Parts



Menu Bar

| Domain(D) Connection(C) Access points(S) User(U) View(V) Tool(T) | Help(H) |
|--|---------|
|--|---------|

| | Item | Description | Refer to | |
|---------------|----------------------|---|-----------|--|
| Domain | Modify Domain | Modify registered domain information. | page 1-14 | |
| | Logout | Log out. | | |
| Connection | Connect VPN | Establish a VPN connection with the selected access point. | page 1-15 | |
| | Disconnect VPN | Disconnect the current VPN connection. | | |
| Access points | New access point | Register an access point and VPN terminal (V9). | page 1-16 | |
| | Delete access point | Delete an access point and VPN terminal (V9). | page 1-18 | |
| | Modify access point | Change access point and VPN terminal (V9) settings. | | |
| User | New user | Perform user registration. | page 1-19 | |
| | Delete user | Delete a user. | page 1-20 | |
| | Modify user | Modify user settings. | | |
| | Change user password | Change a user password. | | |
| View | Show domain | Display domain information. | page 1-21 | |
| | Refresh | Obtain information on the current domain from the authentication server and display it. | | |
| | Log info | Check V-Connect operation logs and VPN connection history. | | |
| Tool | Proxy settings | Configure proxy settings. | page 1-23 | |
| | Option settings | Configure tool operation. | | |
| Help | About | Check the V-Connect version information and license agreement. | page 1-24 | |

Toolbar

🗱 Logout 🚸 Connect VPN 🚿 Disconnect VPN 🧔 Refresh 🛷 Proxy settings 👔 Option settings

| Item | Description | Refer to |
|-----------------|---|-----------|
| Logout | Log out. | page 1-14 |
| Connect VPN | Establish a VPN connection with the selected access point. | page 1-15 |
| Disconnect VPN | Disconnect the current VPN connection. | |
| Refresh | Obtain information on the current domain from the authentication server and display it. | page 1-21 |
| Proxy settings | Configure proxy settings. | page 1-23 |
| Option settings | Configure tool operation. | |

Tree Window/Information Window

The details of the item selected in the tree window can be checked in the information window.

• Domain

| 谢 V-Connect - Hakko Taro | | | |
|---|---|---|--|
| Domain(D) Connection(C) Acc | ess points(S) User(U) Vie | w(V) Tool(T) Help(H) | |
| 🗱 Logout 🐵 Connect VPN 🚿 Disc | connect VPN 🧔 Refresh 🛷 P | oxy settings 👔 Option settings | |
| Controuct Access points Access points Access points TERM001 TERM002 TERM004 TERM004 TERM004 TERM004 Access points User list Hakko Taro Hakko Taro | Domain name Company name Address ZIP code State/Province City Town Country | Monitouch hakko_gijyutsu Ishikawa Hakusan shi Japan | |
| | Phone | 0762745130 | |
| | Name of retailer | | |

• Access points

| V-Connect - Hakko Taro | | | | | | | |
|--------------------------------|-----------------------------|-------------------------|----------|------------|------------|---------------|---------------|
| Domain(D) Connection(C) Ac | cess points(S) User(U) Viev | w(V) Tool(T) Help(H |) | | | | |
| 🗿 Logout 🚸 Connect VPN 🛛 💕 Di: | sconnect VPN 🧔 Refresh 🛷 Pr | oxy settings 👔 Option s | ettings | | | | |
| | | | | | | | |
| - Access points | Access point name | Pla | ntA | | | | |
| E PlantA | IP address | 192 | 2.168.50 |).1 | | | |
| La TERMODI | Subnet mask | 255 | 5.255.25 | 5.0 | | | |
| TERM002 | DHCP Start Address | 192 | 2.168.50 | 0.10 | | | |
| TERM003 | DHCP assignment ip a | address number 100 |) | | | | |
| TERM004 | | | | | | | |
| TERM006 | Routing reconfigu | ration | | | | | |
| iser list ∎ Hakko Taro | | | | | | | |
| Hakko Taro | VPN Terminal name | Active ID | Туре | IP address | SubnetMask | LocalNetwork1 | SubnetMask1 |
| | TERM001 | 5TCuV026v01164A1 | DHCP | | | 192.168.90.0 | 255.255.255.0 |
| Disconnected | TERM002 | 5TCuV026v01564A1 | DHCP | | | | |
| | TERM003 | 5TCuV026v0c274A1 | DHCP | | | | |
| 浸 Connected | TERM004 | 5TCuV02Jv0c874A1 | DHCP | | | | |
| | TERM006 | 5TCKV02p4f1159A1 | | | | | |

• VPN terminals

| 👌 V-Connect - Hakko Taro | | | | |
|---|---|--|---------------------------------|-------------------------------|
| Domain(D) Connection(C) Acce | ss points(S) User(U) View(V) | Tool(T) Help(H) | | |
| 🏙 Logout 🐵 Connect VPN 🛯 💕 Disc | onnect VPN 🧔 Refresh 💣 Proxy se | ettings 🛔 Option settings | | |
| Monitouch Access points PlantA PlantA TERM001 TERM001 TERM002 | VPN terminal name Active ID IP address assignment IP address | TERM001 5TCuV026v01164A1 DHCP 192.168.50.10 | Subnet mask | 255.255.255.0 |
| | MAC address | 00:50:FF:08:AB:0C | | |
| 👤 Hakko T 👤 Hakko I | Network address1 Subnet mask | 192.168.90.0 255.255.255.0 | Network address2 Subnet mask | 192.168.10.0 255.255.255.0 |
| Connected | VPN status Source IP address | Online 61.121.103.156 | | |
| Disconnected | Session start time Last authentication time | 09/01/2015 19:39:20 09/01/2015 19:39:20 | | |
| | Sending data size Receiving data size | 1,024Bytes 49,310Bytes | | |

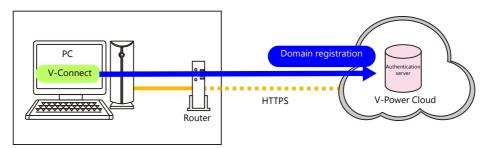
• Users

| 👌 V-Connect - Hakko Taro | | | |
|----------------------------|--------------------------------|------------------------------|--|
| Domain(D) Connection(C) A | ccess points(S) User(U) View(| V) Tool(T) Help(H) | |
| 🗱 Logout 🚸 Connect VPN 🚿 D | isconnect VPN 🧔 Refresh 🛷 Prox | y settings 🛔 Option settings | |
| 🖃 🗐 Monitouch | | | |
| 🖶 🕂 Access points | Full name | Hakko Ichiro | |
| 🗄 🖓 🙀 PlantA | User ID | user_0123456 | |
| TERM001 | | | |
| | Company and/or Depar | tment | |
| ERM003 | E-mail | | |
| 🔚 TERM004 | Types of authority | User | |
| TERM006 | | | |
| 🖮 🚣 User list | | | |
| Hakko Taro | | | |
| Hakko Ichiro | | | |
| | | | |

1.3.5 Domain

Registering a Domain

Use the "V-Connect" management tool to register domain information to the "V-Power Cloud" authentication server. Domain registration must be performed by a domain administrator.



Procedure

- 1. Start V-Connect.
- 2. Click the [New Domain] button.

| N-Connect Login | | |
|-----------------|--|-----------|
| Domain name | | |
| User ID | | |
| Password | | |
| | □ Remember the domain name and user ID | Option(0) |
| New domain(D | ОК | Cancel |

3. Enter the information required to register a domain and click the [OK] button. An asterisk (*) denotes a mandatory field.

| Domain Information | | | | | |
|--------------------|------|----------------------|---------------------------|---|-----------|
| | | ation (free license) | | | |
| Set the domain inf | orma | ition. | | | |
| (*: Required) | | | | | |
| Domain name | * | | Administrator information | | |
| | | | User ID | * | |
| Country | | Japan 🔻 | Password | * | |
| Company name | * | | Password (Confirm) | * | |
| Phone | * | | Company and/or | | |
| ZIP code | | | Department | | |
| | | | FullName | * | |
| State/Province | * | | E-mail address | * | |
| City | * | | E-mail address (Confirm) | * | |
| Town | | | | | |
| Name of retailer | | | | | |
| | | | | | OK Cancel |

| | Item | Max. Characters | Remarks |
|--------------------|------------------|-----------------|--|
| Domain information | Domain name | 4 to 16 | One-byte alphanumeric characters (case-sensitive) Symbols: !, #, \$, %, &, -, ^, @, ., and _ |
| | Country | - | |
| | Company name | 100 | Maximum of 100 one-byte or two-byte characters |
| | Phone | 30 | One-byte numerals Symbols: (,), -, +, _ , ., and space |
| | ZIP code | 20 | One-byte alphanumeric characters (case-sensitive) Symbols: -, _, ., and space |
| | State/Province | 60 | Maximum of 60 one-byte or two-byte characters |
| | City | 120 | Maximum of 120 one-byte or two-byte characters |
| | Town | 120 | Maximum of 120 one-byte or two-byte characters |
| | Name of retailer | 100 | Maximum of 100 one-byte or two-byte characters |

| | Item | Max. Characters | Remarks |
|------------------------------|---------------------------|-----------------|--|
| Administrator information | User ID | 8 to 20 | One-byte alphanumeric characters (not case-sensitive) Symbols: #, %, &, -, ., and _ |
| | Password | 6 to 20 | One-byte alphanumeric characters (case-sensitive) |
| | Password (Confirm) | | Symbols: #, %, &, -, ., and _ |
| | Company and/or Department | 100 | Maximum of 100 one-byte or two-byte characters |
| | Full Name | 60 | Maximum of 60 one-byte or two-byte characters |
| | E-mail address | 256 | |
| | E-mail address (Confirm) | | |

4. Click [Send] in the [Send Domain Information] dialog box. A message indicating that temporary domain registration is complete is displayed.

To revise the entered information, click [Cancel] to return to the entry window. An error message is displayed if there is a mistake in the information for registration. Correctly enter the information and try again.

| Send Domain Information | | |
|---|--|--------------------------------------|
| Domain information will be temp registration notification will be se Are you sure? * Information to send will be enc | | |
| | Send Cancel | Return to the entry window. |
| | Temporary Domain Registration Completion | |
| | Temporary domain registration is | completed. |
| | A temporary registration completion me | essage has been sent via e-mail. |
| | Confirm your registration using the aut within 72 hours . | hentication code given in the e-mail |
| | Confirm domain | n registration |

5. Click the [Confirm domain registration] button. The [Domain Registration Confirmation] window is displayed.

| Domain Registration Confirmation | × |
|---|---|
| Confirm registration of domain. | |
| An authentication code is required to complete (confirm) the domain registration . | |
| Enter the authentication code given in the temporary registration completion notification. | |
| Authentication code | |
| * Confirm your registration within 72 hours from temporary registration. | |
| Registration can be confirmed with the temporarily registered domain name and administrator user ID. | |
| OK Cancel | |

6. Check that the administrator receives an email with the subject "Hakko Electronics Web Machine Interface - VPN Service Temporary Registration".

 Copy the authentication code in the email and paste it into the [Authentication code] field in the [Domain Registration Confirmation] window.
 Click [OK].

| Hakko Electronics Web Machine Interface - VPN Service Temporary Regis | stration |
|---|--|
| Web Machine Interface <wmi-info@vpower-cloud.com></wmi-info@vpower-cloud.com> | |
| | |
| Sent : 2015/01/09 (金) 20:09 | |
| To: Hakko Taro | |
| | |
| Subject: Hakko Electronics Web Machine Interface - VPN Service Temporary Registr | ation. |
| | |
| Thank you very much for choosing Hakko Electronics Web Machine Interface VPN ser | vice. |
| | Domain Registration Confirmation |
| The email address <u>Chakko-elec.co.jp</u> was temporarily registered as the emai | Confirm registration of domain. |
| [Authentication code] | An authentication code is required to complete (confirm) the domain registration . |
| 29e9 | Enter the authentication code given in the temporary registration completion notification. |
| Start the V-Connect software and enter the authentication code to finalize your | |
| | Authentication code 29e9 |
| <validity of="" registration="" temporary=""></validity> | |
| You must finalize your registration within 72 hours. In case your finalization is not confirmed within this period, the authentication | * Confirm your registration within 72 hours from temporary registration. |
| be voided. | Registration can be confirmed with the temporarily registered domain name |
| | and administrator user ID. |
| <if by="" email="" feel="" mistake="" receive="" this="" you=""> This email is a system-generate</if> | OK Cancel |
| Please discard this email if you think you received it in error. | |
| Your email address information will be automatically deleted in 72 hours. | |
| | |



Period of temporary registration validity If the email indicating that temporary registration is complete cannot be checked right away, registration can be completed at a later time by closing V-Connect with the [Cancel] button. However, note that the validity period of temporary registration is 72 hours. If registration is not completed within 72 hours, both the authentication code and temporary registration information are

If registration is not completed within 72 hours, both the authentication code and temporary registration information are invalidated.

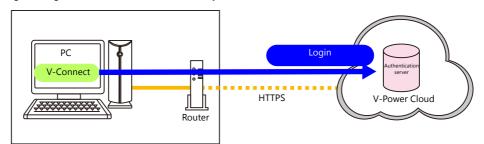
8. Click [Yes] in the confirmation window. A registration complete message is displayed.



This completes the registration process.

Login

Log into the "V-Power Cloud" authentication server from the "V-Connect" management tool. * Always log in using the administrator ID immediately after domain creation.



Procedure

- 1. Start V-Connect.
- Enter the information (domain name/user ID/password) for the registered domain.
 To avoid having to enter the domain name and user ID from the next time V-Connect is started, select the [Remember the domain name and user ID] checkbox.

| 💐 V-Connect Login | × |
|------------------------|--|
| | |
| Domain name | |
| User ID | |
| Password | |
| | Remember the domain name and user ID Option(0) |
| New domain(<u>D</u>) | OK Cancel |

3. Configure the proxy settings and option settings.

• Proxy settings

Configure these settings when connecting to the Internet via a proxy server.

| | Internet connection proxy settings | | | | | |
|-----------------------------|--|-----|--|--|--|--|
| Option(0) | Direct connection to internet(<u>D</u>) Connect to internet via HTTP proxy server(<u>I</u>) | | | | | |
| Proxy settings(P) | Host name(<u>H</u>) | | | | | |
| Cancel 1 Option settings(0) | Port number(<u>N</u>) | | | | | |
| | User(U) (Option) | | | | | |
| | Password(P) (Option) | | | | | |
| | OK Can | cel | | | | |

| Item | | Description | | | |
|--|-------------|--|--|--|--|
| Direct connection to internet | | Connect to the Internet directly without using a proxy server in cases such as when connecting to a mobile router. | | | |
| Connect to internet via HTTP proxy server *1 | Host name | Set the IP address of the proxy server. | | | |
| | Port number | Set the port number of the proxy server. | | | |
| | User | Set the user ID for logging into the proxy server. | | | |
| | Password | Set the password for logging into the proxy server. | | | |

*1 For information on proxy server settings, consult your network administrator.

 Option settings Configure V-Connect operation.
 Option (0) Opti

| and the second se | Preferences |
|---|--|
| Option(O) | ■ Put in the Task Tray when minimized(<u>M</u>) |
| Cancel [1] Option settings(0) | Refresh cycle of VPN terminals status(<u>C</u>) <u>5 minutes</u> |
| | OK Cancel |
| Item | Description |
| Class a window when lagout | Selected: Class V Connect after logging out |

| Item | Description |
|---------------------------------------|--|
| Close a window when logout | Selected: Close V-Connect after logging out. Unselected: Return to the V-Connect login window after logging out. |
| Put in the Task Tray when minimized | Selected: Display a management tool icon in the task tray when the window is minimized. Unselected: Display the management tool on the task bar when the window is minimized. |
| Refresh cycle of VPN terminals status | Set the cycle for refreshing the status of VPN terminal icons in the tree window. The information window is also refreshed when a VPN terminal is selected. None (no automatic refresh) ^{*1} /1 minute/5 minutes/10 minutes/30 minutes/60 minutes |

*1 Refresh the status by clicking [View] \rightarrow [Refresh].

4. Return to the [V-Connect Login] window and click [OK].

| N-Connect Login | × |
|------------------------|--|
| | |
| Domain name | Monitouch |
| User ID | xxxxhakko |
| Password | ****** |
| | □ Remember the domain name and user ID Option(0) ▼ |
| New domain(<u>D</u>) | OK Cancel |

5. The following window is displayed after successfully logging in.



The following message is displayed if there are no registered access points. Register an access point, VPN terminals, and users.

| Confirm Access Point Registration | | | | |
|---|--|--|--|--|
| No access point is registered. | | | | |
| Register an access point and VPN terminal from the [Access point] / [New access point] menu. | | | | |
| ОК | | | | |

Modifying the Domain

Modify registered domain information.

* Only the domain administrator can perform modifications.

Procedure

1. Select a domain in the tree window.

| 褖 V-Connect - Hakko Taro | | | - • × |
|--|---|----------------------------------|-------|
| Domain(D) Connection(C) Acc | ess points(S) User(U) Vie | w(V) Tool(T) Help(H) | |
| 👬 🗱 Logout 🐵 Connect VPN 💣 Disc | connect VPN 🧔 Refresh 🛷 Pr | roxy settings 🛓 Option settings | |
| Honitouch Access points PlantA TERM001 TERM002 | Domain name Company name Address | Monitouch hakko_gijyutsu | |
| TECM003 TERM004 TERM004 TERM004 TERM006 Jerlist Hakko Taro Hakko Taro Hakko Taro | ZIP code State/Province City Town Country | Ishikawa Hakusan shi Japan | |

2. Click [Domain] → [Modify Domain]. The [Domain Information] window is displayed.

| Domain(D) | Domain Information | | |
|------------------|--------------------|---|----------------|
| Modify Domain(M) | Domain name | | Monitouch |
| 10 Logout(O) | Country | | Japan 🔹 |
| | Company name | * | hakko_gijyutsu |
| | Phone | * | 0762745130 |
| | ZIP code | | |
| | State/Province | * | Ishikawa |
| | City | * | Hakusan shi |
| | Town | | |
| | Name of retailer | | |
| | | | |
| | | | OK Cancel |

3. Perform any modifications and click [OK] when finished.

Logout

Log out of V-Connect. If a VPN connection is established, the software also disconnects from the VPN.

Procedure

1. Click the [Logout] icon or [Domain] \rightarrow [Logout]. A confirmation dialog box is displayed.

| | V-Connect |
|------------------|-----------------------------------|
| N Logout | |
| | Are your sure you want to logout? |
| Domain(D) | Ŭ |
| Modify Domain(M) | ОК Cancel |
| Logout(O) | Cancer |

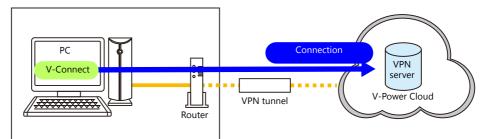
2. Click [OK] to log out.

1

1.3.6 Connection

Establishing a VPN Connection

Connect the "V-Connect" management tool to the "V-Power Cloud" access point.

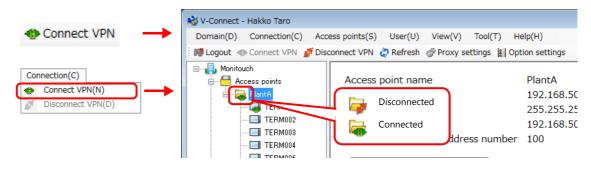


Procedure

1. Select an access point in the tree window.

| N-Connect - Hakko Taro | | | | | | | - • • •× |
|--------------------------------|--|-------------------------------|----------------------------------|------------|------------|---------------|---------------|
| Domain(D) Connection(C) Acc | ess points(S) User(U) View(V) | Tool(T) Help(H) | | | | | |
| 🗄 🏙 Logout 🚸 Connect VPN 🚿 Dis | connect VPN 🧔 Refresh 💣 Proxy | settings 📳 Option se | ttings | | | | |
| Monitouch | Access point name IP address Subnet mask DHCP Start Address DHCP assignment ip addr Routing reconfigurati | 255 192 ress number 100 | .168.50. .255.255 .168.50. | .0 | | | |
| Hakko Taro | VPN Terminal name | Active ID | Туре | IP address | SubnetMask | LocalNetwork1 | SubnetMask1 |
| _ | TERM001 | 5TCuV026v01164A1 | DHCP | | | 192.168.90.0 | 255.255.255.0 |

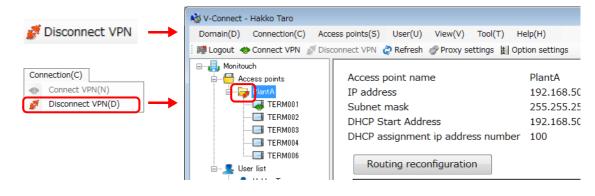
2. Click the [Connect VPN] icon or [Connection] → [Connect VPN]. A VPN connection is established.



Disconnecting a VPN Connection

Procedure

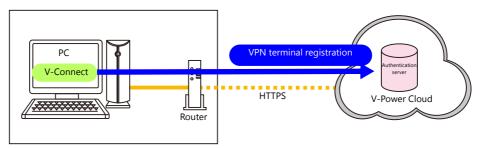
- 1. Select an access point in the tree window.
- 2. Click the [Disconnect VPN] icon or [Connection] \rightarrow [Disconnect VPN]. The VPN connection is disconnected.



1.3.7 Access Points

Registering Access Points

Use the "V-Connect" management tool to register access points and VPN terminals to the "V-Power Cloud" authentication server.



Procedure

- 1. Click [Access points] → [New access point]. The [Access Point Information] window is displayed.
- 2. Set the access point information.

| | Access Point Information | × | | |
|-----------------------------|--|---|--|--|
| | Set the relevant information of the access point. (*: Required) | | | |
| Access point | Access point name * PlantA |) | | |
| information | IP address * 192 . 168 . 50 . 1 Subnet mask * 255 . 255 . 255 . 0 | | | |
| | DHCP start address * 192 . 168 . 50 . 10 DHCP assignment * 100 ip address number | J | | |
| | Allowable number of additional 5 VPN terminals | | | |
| VPN terminal information | Registered VPN terminals in domain 0 Additional number 5 VPN terminals registered 0 of VPN terminals for this access point | | | |
| | Active ID VPN Terminal name CSV output OK Cancel | | | |

| Item | Description | Remarks |
|--|---|--|
| Access point name | Access point name | Maximum of 100 characters |
| IP address | Virtual IP address of the access point *1 | IPV4 address classes A through C can be specified. |
| Subnet mask | Subnet mask of the access point | |
| DHCP start address | Start IP address used when allocating virtual IP addresses ^{*1} of VPN terminals (V9) using DHCP | |
| DHCP assignment IP address number | Maximum number of VPN terminals for allocating virtual IP addresses ^{*1} using DHCP | 0 to 254 |
| Allowable number of additional VPN terminals | Allowable number of additional VPN terminals that can be registered | 0 to 999 ^{*2} |
| Registered VPN terminals in domain | Number of VPN terminals that can be registered to the domain | |
| VPN terminals registered for this access point | Number of VPN terminals registered to the selected access point | |
| Additional number of VPN terminals | Register additional VPN terminals | 0 to 999 ^{*2} |
| CSV output | Output VPN terminal information to CSV file | |

*1 Virtual IP addresses

IP addresses that are only allocated for the purpose of VPN connection. These IP addresses cannot be used for any other purpose.

*2 The maximum number differs depending on the license type. Refer to "1.1.3 License"

3. Register VPN terminals (V9).

Enter a value for [Additional number of VPN terminals] and click [Add]. The number of specified VPN terminals are temporarily registered.

| | VPN terminals registered for this access point | Additional num 5 of VPN termina | | Add |
|-------------------------|---|------------------------------------|------|--------|
| Additional number 5 Add | Active ID | VPN Terminal name | | ^ |
| of VPN terminals | 5TCuV026v01164A1 | TERM001 | Edit | Delete |
| minal name | 5TCuV026v01564A1 | TERM002 | Edit | Delete |
| | 5TCuV026v0c274A1 | TERM003 | Edit | Delete |
| | 5TCuV02Jv0c874A1 | TERM004 | Edit | Delete |
| | CSV output | [| ОК | Cancel |

4. If VPN terminal information requires modification, click [Edit] to modify and [OK] to accept the changes.

| Active ID | 5TCuV026v01164A1 |
|---------------------|--------------------|
| VPN terminal name 🔹 | TERM001 |
| | ● DHCP ○ Static IP |
| IP address | |
| Subnet mask | • • • |
| Local network1 | Local network2 |
| Subnet mask | Subnet mask |

| Item | Description | Remarks | |
|---|--|---|--|
| Active ID | VPN terminal ID This ID is automatically issued by the authentication server. | Registered VPN terminals can be updated by clicking [Delete] \rightarrow [Add]. | |
| VPN terminal name | Name of the VPN terminal | | |
| DHCP ^{*1} Static IP ^{*2} | IP address allocation method for the VPN terminal | [DHCP]: Automatically issued from the server | |
| IP address | IP address of the VPN terminal | [Static IP]: User-defined | |
| Subnet mask | Subnet mask of the VPN terminal | | |
| Local network1 | Address of local network 1 of the VPN terminal | Settable with LAN2CH and LAN3CH | |
| Subnet mask | Subnet mask of local network 1 of the VPN terminal | types | |
| Local network2 | Address of local network 2 of the VPN terminal | Settable with LAN3CH type | |
| Subnet mask | Subnet mask of local network 2 of the VPN terminal | | |

- *1 The IP address may change because it is automatically allocated by the server.
- *2 The set IP address and subnet mask are always allocated.
- 5. When all VPN terminal settings are configured, click [OK]. The access point and VPN terminal are registered to the authentication server.

| VPN terminals registered for this access point | 5 | Additional num of VPN termina | | Add | |
|---|----------|----------------------------------|------|--------|----------|
| Active ID | VPN Term | inal name | | | |
| 5TCuV026v01164A1 | TERM001 | | Edit | Delete | |
| 5TCuV026v01564A1 | TERM002 | | Edit | Delete | ≡ |
| 5TCuV026v0c274A1 | TERM003 | | Edit | Delete | <u>]</u> |
| 5TCuV02Jv0c874A1 | TERM004 | | Edit | Delete |]. |
| CSV output | | | ОК | Cancel | |

6. To delete a VPN terminal, click [Delete] and [OK].



Deleting a VPN terminal causes the active ID to disappear completely. When registering the VPN terminal again, a different active ID is allocated. Take sufficient care when deleting VPN terminals in use.

Deleting Access Points

Delete registered access points.

Procedure

- 1. Select an access point to delete in the tree window.
- Click [Access points] → [Delete access point]. A confirmation dialog box is displayed. If deleting an access point when a VPN connection is established, select the [Force Delete] checkbox.

| Access points(S) | Delete Access Point | — |
|--------------------------|-----------------------|------------------|
| New access point(A) | The next access point | will be deleted. |
| 🛬 Delete access point(R) | The next decess point | Win De deleted. |
| Modify access point(M) | Access point name | PlantA |
| | | Force Delete |
| | ОК | Cancel |

3. Click [OK] to delete the access point.

Modifying Access Points

Modify registered access point information and VPN terminal information and delete VPN terminals.

Procedure

- 1. Select an access point in the tree window.
- 2. Click [Access points] → [Modify access point]. The [Access Point Information] window is displayed.

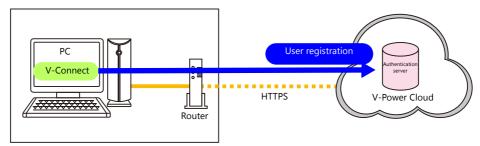
| Access points(S) | Access Point Information |
|---|--|
| New access point(A) Delete access point(R) | Set the relevant information of the access point. (*: Required) |
| bodify access point(M) | Access point name * PlantA |
| | IP address * 192 . 168 . 50 . 1 Subnet mask * 255 . 255 . 255 . 0 |
| | DHCP start address * 192.168.50.10 DHCP assignment * 100 ip address number |
| | Allowable number of additional 0 VPN terminals |
| | Registered VPN terminals in domain 5 Additional number Add VPN terminals registered 5 of VPN terminals Add for this access point Add Add Add |
| | Active ID VPN Terminal name |
| | 5TCuV026v01164A1 TERM001 Edit Delete |
| | 5TCuV026v01564A1 TERM002 Edit Delete |
| | 5TCuV026v0c274A1 TERM003 Edit Delete |
| | 5TCuV02Jv0c874A1 TERM004 Edit Delete |
| | CSV output OK Cancel |

3. Modify the settings. For details on settings, refer to "Registering Access Points".

1.3.8 Users

Registering Users

Use the "V-Connect" management tool to register user information to the "V-Power Cloud" authentication server. A maximum of 20 users can be registered to a single domain.



Procedure

- 1. Click [User] \rightarrow [New user]. The [New User] window is displayed.
- 2. Register user information.

An asterisk (*) denotes a mandatory field.

| Liese/LI) | New User | × |
|---|--|--------|
| User(U) New user(A) Delete user(R) Modify user(M) Change user password(P) | UserID * Password (Confirm) * FullName * e-mail e-mail (Confirm) Company and/or Department Types of authority | User • |

| Item | Max. Characters | Remarks |
|---------------------------|-----------------|--|
| User ID * | 8 to 20 | One-byte alphanumeric characters (not case-sensitive) Symbols: -, _ , #, %, &, and. |
| Password * | 6 to 20 | One-byte alphanumeric characters (case-sensitive) |
| Password (Confirm) * | | Symbols: -, _ , #, %, &, and. |
| Full Name * | 60 | Maximum of 60 one-byte or two-byte characters |
| e-mail | 256 | |
| email (Confirm) | | |
| Company and/or Department | 100 | Maximum of 100 one-byte or two-byte characters |
| Types of authority | - | Normal user/administrator For more information, refer to "1.3.2 User Types and Privileges". |

3. Click [OK] to complete user registration.

Deleting Users

Delete registered users.

- 1. Select a user to delete from the user list in the tree window.
- 2. Click [User] \rightarrow [Delete user]. A confirmation window is displayed.
 - If deleting a user with an established VPN connection, select the [Force Delete] checkbox.

| User(U) | Delete User | | |
|--------------------------------|------------------------------|----------------------|--|
| New user(A) Delete user(R) | The next user accou | int will be deleted. | |
| Change user password(P) | UserID | user_0123456 | |
| | FullName | Hakko Ichiro | |
| | e-mail | | |
| | Company and/or Department | | |
| | Types of authority | User | |
| | | Force Delete | |
| | 0 | K Cancel | |

3. Click [OK] to delete the user.

Modifying User Information

Modify registered user information.

- 1. Select a user to modify from the user list in the tree window.
- 2. Click [User] \rightarrow [Modify user]. The [Modify User] window is displayed.

| | Modify User | | |
|---------|--------------------|---|--------------|
| ser(A) | | | |
| user(R) | UserID | * | user_0123456 |
| user(M) | FullName | * | Hakko Ichiro |
| | e-mail | | |
| | e-mail (Confirm) | | |
| | Company and/or | | |
| | Department | | |
| | Types of authority | | User |
| | | | ОК |

3. Modify the registered information and click [OK] when finished.

Changing User Passwords

Change a registered password.

- 1. Select the user whose password is to be changed from the user list in the tree window.
- 2. Click [User] \rightarrow [Change user password]. The [Change user password] window is displayed.

| User(U) | Change user password |
|---|---|
| New user(A) Delete user(R) Modify user(M) | Please set the password to be changed. (Alphanumeric and#%_ 6-20 characters) Please also set the password for confirmation in order to prevent the change mistake. |
| Change user password(P) | New Password |
| | New Password (Confirm) |
| | OK Cancel |

3. Enter a new password and click [OK] when finished.

1.3.9 View

Show Domain

Display the obtained domain information.

| n Information | | |
|---------------------|---------------------|----|
| | | |
| Domain name | Monitouch | |
| | | |
| Company name | hakko_gijyutsu | |
| Address | | |
| ZIP code | | |
| State/Province | Ishikawa | |
| City | Hakusan shi | |
| Town | | |
| Country | Japan | |
| Phone | 0762745130 | |
| Name of retailer | | |
| Administrator | Hakko Taro | |
| Administrator's e-m | @hakko-elec.co.jp | |
| Last update date | 09/01/2015 20:48:19 | |
| License type | Free License | |
| Licensed date | 06/01/2015 19:16:59 | |
| Expiration date | after 27 day(s) | |
| | | ОК |

Refresh

Obtain information on the current domain from the authentication server and refresh the display.

Log Info

Logs containing management operations performed using V-Connect and VPN connection history for the last three months can be checked.

The following table lists the log information that can be referenced and which users can reference it.

| Operation | | Log Information | Domain Administrator Administrator | Normal User | |
|-----------------------|----------------------------|---|---------------------------------------|-------------|--|
| Management operations | Register user | Date/time Registered user ID, name User ID and name of user that performed registration | | | |
| | Delete user | Date/time Deleted user ID, name User ID and name of user that performed deletion | - | | |
| | New access point | Date/time Registered access point name User ID and name of user that performed registration | | ~ | |
| | Delete access point | Date/time Deleted access point name User ID and name of user that performed deletion | | × | |
| | VPN terminal registration | Date/time Registered VPN terminal name User ID and name of user that performed registration | | | |
| | VPN terminal deletion | Date/time Deleted VPN terminal name User ID and name of user that performed deletion | - | | |
| VPN connections | User VPN connection | Date/time User ID and name | | | |
| | User VPN disconnection | Date/time User ID and name Duration of connection Sizes of sent and received data | | 0 | |
| | VPN terminal connection | Date/time VPN terminal name and active ID | | 0 | |
| | VPN terminal disconnection | Date/time VPN terminal name and active ID Duration of connection Sizes of sent and received data | | | |

Procedure

1. Click [View] \rightarrow [Log info]. The [Log Information] window is displayed.

| View(V) Show domain(D) Refresh(R) Log info(L) | Log Inform Period | nation 2015/01/09 ■• Category Admin • Ope User All • Search(S) ~ 2015/01/09 ■• Operation All • CSV output(<u>V</u>) |
|--|----------------------|--|
| | Time | Operation Ope User Access Point 🔺 User VPN Term |

2. Set [Period], [Category], and any other required options.

| og Informa | ation | | | | | | | | | |
|------------|-------------------------------|-----------|--------------|----------|------------|---------|--------|----|--------|--|
| Period | 2015/01/09 ~ 2015/01/09 | | Admin All | • | Ope User 🛛 | All | | | • | Search(<u>S</u>) CSV output(<u>V</u>) |
| Time | | Operation | | Ope User | Access | s Point | 🔺 User | VP | N Term | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

3. Click [Search]. The search results are displayed. Example: Management logs

| og Information | | | | | | |
|----------------------------------|---------------------|------------------------|--------------|--------------------------|----------|---|
| Period 2015/01/ ~ 2015/01/ | cutegory | | Ope User A | I | • | Search(<u>S</u>) CSV output(\underline{V}) |
| Time | Operation | Ope User | Access Point | User | VPN Term | |
| 06/01/2015 19:21:04 | Regist access point | Hakko Taro/xxxxhakko | Monitouch | | | |
| 06/01/2015 19:21:04 | Regist VPN terminal | Hakko Taro/ xxxx hakko | PlantA | | TERM001 | |
| 06/01/2015 19:21:04 | Regist VPN terminal | Hakko Taro/ xxxx hakko | PlantA | | TERM002 | |
| 06/01/2015 19:21:04 | Regist VPN terminal | Hakko Taro/ xxxx hakko | PlantA | | TERM003 | |
| 06/01/2015 19:21:04 | Regist VPN terminal | Hakko Taro/ xxxx hakko | PlantA | | TERM004 | |
| 06/01/2015 19:21:04 | Regist VPN terminal | Hakko Taro/ xxxx hakko | PlantA | | TERM005 | |
| 06/01/2015 19:35:16 | Delete VPN terminal | Hakko Taro/ xxxx hakko | PlantA | | TERM005 | |
| 06/01/2015 19:37:56 | Regist VPN terminal | Hakko Taro/ xxxx hakko | PlantA | | TERM006 | |
| 09/01/2015 19:41:47 | Regist user | Hakko Taro/ xxxx hakko | | Hakko Ichiro/HakkoIchiro | | |

4. Click [CSV output] to save the search results to a CSV file.

| 🛃 Lo | | | | | | | | |
|------|---------------------|---------------------|----------------------|--------------|--------------------------|----------|---|----|
| | | | | | | F | G | |
| 1 | Time | Operation | Ope User | Access Point | User | VPN Term | | 1 |
| | 06/01/2015 19:21:04 | Regist access point | Hakko Taro/xxxxhakko | Monitouch | | | | Ĩ. |
| | 06/01/2015 19:21:04 | Regist VPN terminal | Hakko Taro/xxxxhakko | PlantA | | TERM001 | | |
| | 06/01/2015 19:21:04 | Regist VPN terminal | Hakko Taro/xxxxhakko | PlantA | | TERM002 | | |
| | 06/01/2015 19:21:04 | Regist VPN terminal | Hakko Taro/xxxxhakko | PlantA | | T ERM003 | | |
| | 06/01/2015 19:21:04 | Regist VPN terminal | Hakko Taro/xxxxhakko | PlantA | | TERM004 | | |
| | 06/01/2015 19:21:04 | Regist VPN terminal | Hakko Taro/xxxxhakko | PlantA | | TERM005 | | |
| | 06/01/2015 19:35:16 | Delete VPN terminal | Hakko Taro/xxxxhakko | PlantA | | TERM005 | | |
| | 06/01/2015 19:37:56 | Regist VPN terminal | Hakko Taro/xxxxhakko | PlantA | | TERM006 | | |
| | 09/01/2015 19:41:47 | Regist user | Hakko Taro/xxxxhakko | | Hakko Ichiro/HakkoIchiro | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

1.3.10 Tool

Proxy Settings

| Tool(T) Image: Proxy settings(P) Image: Proxy settings(O) Image: Proxy settings(O) | | Internet connection proxy settings Direct connection to internet(D) Connect to internet via HTTP proxy server(I) Host name(H) Port number(N) User(U) (Option) Password(P) OK Cancel | | | | |
|--|-------------|--|--|--|--|--|
| Item | | Description | | | | |
| Direct connection to internet | | Connect to the Internet directly without using a proxy server in cases such as wher connecting to a mobile router. | | | | |
| Connect to internet via HTTP | Host name | Set the IP address of the proxy server. | | | | |
| proxy server ^{*1} | Port number | Set the port number of the proxy server. | | | | |
| | User | Set the user ID for logging into the proxy server. | | | | |
| | Password | Set the password for logging into the proxy server. | | | | |

Configure these settings when connecting to the Internet via a proxy server.

*1 For information on proxy server settings, consult your network administrator.

Option Settings

Configure V-Connect operation.

| Option settings |
|---|
| Preferences |
| Close a window when logout(<u>L</u>) |
| Put in the Task Tray when minimized(\underline{M}) |
| Refresh cycle of VPN terminals status(<u>C</u>) 5 minutes • |
| |
| |
| OK Cancel |
| |

| Item | Description | | |
|---------------------------------------|--|--|--|
| Close a window when logout | Selected: Close V-Connect after logging out. Unselected: Return to the V-Connect login window after logging out. | | |
| Put in the Task Tray when minimized | Selected: Display a management tool icon in the task tray when the window is minimized. Unselected: Display the management tool on the task bar when the window is minimized. | | |
| Refresh cycle of VPN terminals status | Set the refresh cycle during VPN connection. None (no automatic refresh) ^{*1} /1 minute/5 minutes/10 minutes/30 minutes/60 minutes | | |

*1 Refresh the status by clicking [View] \rightarrow [Refresh].

1.3.11 Help

About

| Help(H) About(A) License Agree | V-Connect V-Connect Version 1.1.0.0 Copyright(C)2014 Hakko Electronics Co., Ltd. All right reserved License Agreement(<u>C</u>) OK |
|---|---|
| This V-C. Hakko EH Before us If you do your loca With the to these The term updated | ct License Agreement onnect License Agreement ("Agreement") is concluded between you and ectronics Co., Ltd. ("Hakko"). sing this V-Connect("Software"), be sure to read the Agreement carefully. not agree to the terms and conditions of the Agreement, return the Software to I distributor before installing it. commencement of installation of the Software, you are deemed to have accepted terms and conditions of the Agreement. is and conditions of the Agreement shall also apply to all the products (manuals, versions, etc.) related to the Software. |
| | ۲ Close(Q) |

Version information of "V-Connect" and the license agreement can be checked.

1.4 V9 Series Unit Settings

1.4.1 IP Address Settings

Set the IP address of the V9 series unit.

Procedure

- 1. Enter Local mode on the V9 series unit.
 - * For details on entering Local mode, refer to the V9 Series Troubleshooting/Maintenance Manual.
 - V9 Standard / V9 Lite
 - Press the [SYSTEM] switch to display the system menu and then press the [Local] switch.
 - V9 Advanced

Press one corner of the screen for at least 2 seconds and release your finger when there is a beep. Then within one second, press a different corner and hold for at least 2 seconds to display the system menu. Press the [Local] switch on the displayed system menu.

| System menu ——— | D Local | | Storage Removal | Storage Viewer | |
|-----------------|-------------------|----------|--------------------|-------------------|--|
| | | | <u> </u> | <u> </u> | |
| | | 52 60 | | | |
| | | 0 | | | |
| | | 0 | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

- 2. Display the [LAN Setting] screen.
- * When using the LAN2CH or wireless LAN type of V9 Advanced / V9 Standard models, LAN2/WLAN settings can also be configured.
- 3. Set the IP address for connecting to the Internet and accept the setting by pressing [Apply].

| D | LAN Setting | 2015-01-04 22:38:32 |
|-----------------|-------------------------------|---|
| RUN | IP Setting Option | |
| () System | IP Address 10.91.130.235 | Set an IP address of the same class as that of |
| Information | Subnet Mask 255.255.255.0 | the router for connecting to the Internet |
| 🥎 Language | Gateway 10.91.130.1 | Set the IP address of the router for connecting |
| Setting | MAC Address 00:50:FF:08:AB:0C | |
| | Network Table | |
| LAN Setting | No Host Name IP Address | Sub Net Mask Gate Way Service Po |
| | | |
| LAN2 Setting | | |
| <u>ശ്</u> ര) | | |
| WLAN Setting | | |
| ø | | |
| VPN Setting | | |
| | | Cancel Apply |



When using the LAN2CH or wireless LAN type of V9 Advanced / V9 Standard models, do not set a default gateway for LAN port settings other than the VPN connection port.

1.4.2 Date and Time Settings

Set the date and time on the V9 series unit.

A VPN connection cannot be established without setting the correct date and time.

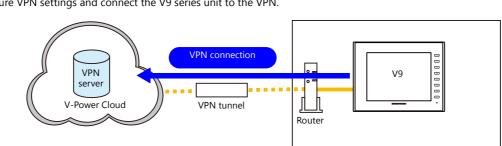
Procedure

- Using the PLC clock Set the date and time of the PLC as the current date and time.
- Using the internal clock of the V9 series unit Configure the date and time settings in Local mode → [Date/Time Setting].

| Ø | Date/Time Se | etting | | | | | | 2015-01- | 04 22:39:51 |
|--------------------------------|--------------|-------------------|----------------|--------|-------|------|-----|----------|-------------|
| VPN Setting | | | | Janu | ary . | 2015 | | | |
| | | Sun | Mon | Tue | Wed | Thu | Fri | Sat | |
| E-Mail Setting | | 28 | 29 | | 31 | 1 | 2 | 3 | |
| SRAM Setting | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| SC Comm. | | 11 | 12 | 13 | 14 | 15 | 16 | 17 | |
| Setting | | 18 | 19 | 20 | 21 | 22 | 23 | 24 | |
| System Setting | | 25 | 26 | 27 | 28 | 29 | 30 | 31 | |
| T Date/Time | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Setting Storage Transfer | | - Time Se 22:3 | 39 : 51 | tancel | 2 : | 39 | | 41 | |

| • | Check the screen program to determine whether the PLC clock or internal clock of the V9 series unit is used. | | | | |
|---|--|--|---|--|--|
| [| System Setting] \rightarrow [Unit Setting] \rightarrow [SRA | $AM/Clock] \rightarrow [Use SRA]$ | M Calendar] | | |
| | Unselected: PLC clock Selected: Internal clock of the VS |) series unit | | | |
| | 🕋 🖹 🤚 🚽 🔿 🐟 👄 🔿 🔻 V Se | SRAM/Clock Setting | × | | |
| | File Home Parts Edit | Use SRAM Calendar | Total No. of Words Available [409472 Word] | | |
| | Multi-language Setting Unit Setting Setting Memory | SRAM Mapping | Header Set Word Count Word Count | | |
| | SRAM/Clock(W) | Storage Area for Memo Pad | [0] + 0 | | |
| | Backlight(L) | Non-volatile Device (Word) (\$L) | | | |
| | System/Mode Switch(S) | Non-volatile Device (Double-word) (\$L | D) (0) + 0 🚔 | | |
| | 👂 👂 Blink/Flash(F) | Japanese Conversion Function | [0 Word] | | |
| | Overlap(O) | Storage of Alarm Server | [0 Word] | | |
| | Video/RGB | Storage of Logging Server | [0 Word] | | |
| | Sound(W) | Operation log storage point | [0 Word] | | |
| | General Setting(E) | oporation rog storage point | [o mora] | | |

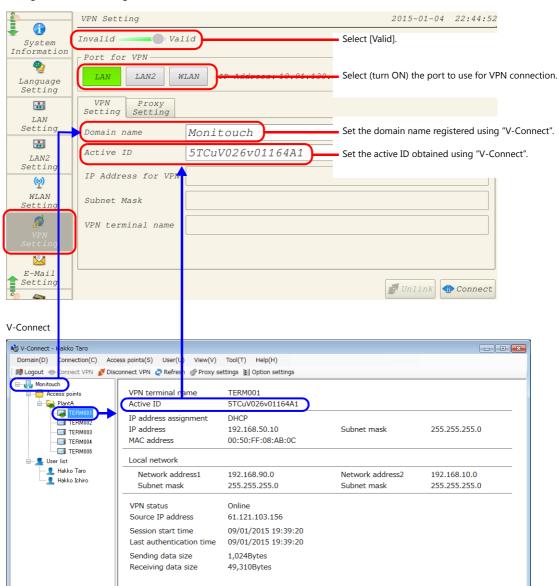
1.4.3 VPN Settings



Configure VPN settings and connect the V9 series unit to the VPN.

Procedure

- 1. Display the [VPN Setting] screen in Local mode.
- 2. Configure the VPN settings.



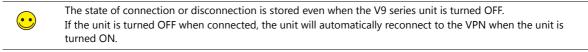
3. When accessing the Internet via a proxy server, configure settings on the [Proxy Setting] tab.

| | VPN Setting | | 2015-01-04 | 22:46:36 |
|--------------------------|------------------------------|--------------------------|------------|----------|
| System | Invalid Valid | | | |
| Information | Port for VPN | | | |
| 🥎 Language Setting | LAN LAN2 WLAN IF | P Address: 10.91.130.235 | | |
| | VPN Proxy Setting Setting | | | |
| LAN Setting | 🗙 Use the proxy server | | | |
| | Proxy Server IP Address | | | |
| LAN2 Setting | Proxy Server Port | | | |
| (P) | User Name | | | |
| WLAN Setting | Password | | | |
| | | | | |
| VPN Setting | | | | |
| | | | | |
| E-Mail Setting | | | 🖉 Unlink 📢 | Connect |
| ->> 🗛 | | | | |

4. Press [Connect] to access V-Power Cloud. If a dialog box with "IP Address for VPN" is displayed as shown below, the V9 series unit connected successfully.

| | VPN Setting | 2015-01-04 | 22:48:15 |
|-----------------------|--|------------|----------|
| System Information | Invalid Valid | | |
| Language Setting | LAN LAN2 WLAN IP Address: 10.91.130.235 | | |
| | VPN Proxy Setting Set | | |
| LAN Setting | 🧶 VPN Setting 🛛 🗙 | |] |
| Secting | Domain name IP Address for VPN:192.168.50.10 | | |
| LAN2 | Active ID | | |
| Setting | OK | | |
| <u>(ဇူ)</u> | IP Address f | | |
| WLAN Setting | Subnet Mask 255.255.0 | | |
| ø | VPN terminal name TERM001 | | |
| VPN Setting | | | |
| | | | |
| E-Mail | | | |
| Setting | | 💕 Unlink 🔌 | Connect |

5. Press [Unlink] to disconnect from the VPN.



1.4.4 VPN Connection/Disconnection

Connection or disconnection of the V9 series unit to the VPN is performed either from the [VPN Setting] screen in Local mode or from the status bar.

VPN Setting Screen

For information on connecting and disconnecting from the [VPN Setting] screen, refer to 1.4.3VPN Settings.

Status Bar

The VPN connection status can be checked and connecting and disconnecting can be performed using the status bar.

Procedure

- 1. Enter Local mode on the V9 series unit.
- * For details on entering Local mode, refer to the V9 Series Troubleshooting/Maintenance Manual.
 - V9 Standard / V9 Lite Press the [SYSTEM] switch to display the status bar.
 - V9 Advanced

Press one corner of the screen for at least 2 seconds and release your finger when there is a beep. Then within one second, press a different corner and hold for at least 2 seconds to display the status bar at the bottom right of the screen.

| 0 | |
|---|-----------------|
| | |
| | |
| | Status bar |
| | 🖈 🚳 💷 🎯 🖬 👪 🗐 🔕 |

2. Press the VPN icon. A status window is displayed.



3. Press [Connect] and [Unlink] to change the connection state. A mark appears on the VPN icon in the disconnected state.



System Device Memory (\$s)

The VPN connection status can be checked using \$s1675.

- 0: VPN not configured
- 1: Connected to VPN
- -1: Disconnected from VPN

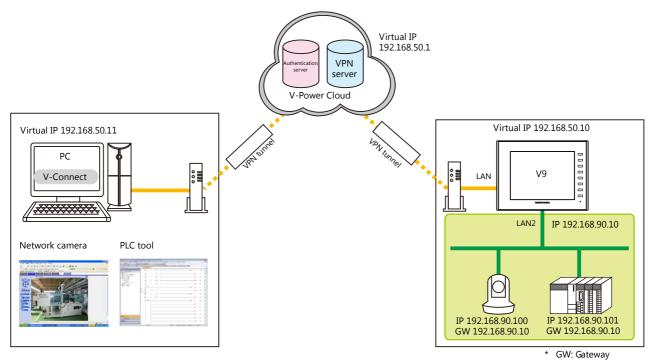
1.5 Routing Function

1.5.1 Overview

V9 series units with multiple LAN ports such as LAN2CH and 3CH types can have multiple IP addresses.

This means that even if one port is exclusively used for VPN connection, the other ports can be used to connect to PLCs or network cameras to form a local network.

Also, because the V9 series unit features a built-in routing function, devices on the local network can also be accessed over a VPN connection.



Remote operations available when using the routing function

- Screen program transfer
- Remote monitoring and operations of network cameras
- Remote monitoring and operations of PLCs

1.5.2 Notes on Connections

V9 Series Unit Settings

IP address settings/default gateways

- Always use a different network group for each IP address of [LAN Setting], [LAN2 Setting], and [WLAN Setting]. If set in the same network group, the system will not operate correctly.
- Only set a default gateway for the port used for VPN connection. Leave the gateways of the local network unconfigured (blank).

| | | | LAN Setting (VPN Connection) | LAN2 Setting | WLAN Setting |
|-----------|---------------|-----------------|---------------------------------|-----------------|-----------------|
| Correct | \rightarrow | IP Address | 10.90.100.5 | 192.168.1.50 | 192.168.10.200 |
| | | Default Gateway | 10.90.100.1 | Not set (blank) | Not set (blank) |
| | | | | | |
| Incorrect | \rightarrow | IP Address | 192.168.1.100 | 192.168.1.50 | 192.168.10.200 |
| | | Default Gateway | 192.168.1.1 | Not set (blank) | 192.168.10.1 |
| | | | | | |

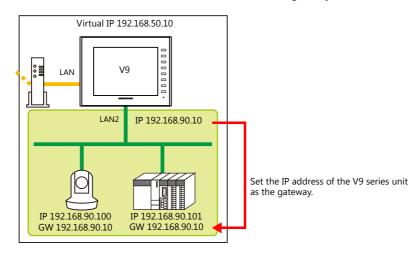
 The IP addresses of [LAN Setting] and [LAN2 Setting] belong to the same network group (192.168.1.x).

The gateway of [WLAN Setting] is set.

Setting example

PLC and Network Camera Settings

• Set the local network IP address of the V9 series unit as the gateway of PLCs and network cameras.



V-Connect Settings

• When V-Connect is connected to the VPN, the routing setting information of V-Connect does not update to the latest state immediately after changing VPN terminal settings E

| 褖 V-Connect - Hakko Taro | | | | | | | - • • |
|----------------------------------|---|------------------------------------|---|------------|------------|---------------|---------------|
| Domain(D) Connection(C) Ac | cess points(S) User(U) View | (V) Tool(T) Help(H |) | | | | |
| 🗄 🏙 Logout 🚸 Connect VPN 🛯 💋 Dis | sconnect VPN 🧔 Refresh 🖉 Pro: | xy settings 📳 Option s | ettings | | | | |
| Monitouch | Access point name IP address Subnet mask DHCP Start Address DHCP assignment ip ac Routing reconfigur | 19 25 19 Idress number 10 | antA 2.168.50 5.255.25 2.168.50 0 | 5.0 | | | |
| Hakko Taro | VPN Terminal name | Active ID | Туре | IP address | SubnetMask | LocalNetwork1 | SubnetMask1 |
| | TERM001 | 5TCuV026v01164A | 1 DHCP | | | 192.168.90.0 | 255.255.255.0 |
| | TERM002 | 5TCuV026v01564A | 1 DHCP | | | | |
| | TERM003 | 5TCuV026v0c274A | L DHCP | | | | |
| | TERM004 | 5TCuV02Jv0c874A1 | DHCP | | | | |
| | TERM006 | 5TCKV02p4f1159A1 | DHCP | | | | |
| | č [| | III | | | | , |

1.6 Errors

V9 Series Unit Errors

• Errors related to V9 series unit settings

| Error No. | Error Message | Cause |
|-----------|---|---|
| 1 | Cannot set the IP address assigned for VPN. | There is a mistake on the [VPN Setting] screen. →Revise the VPN settings. Cannot connect to the Internet. →Check the router settings, gateway, and cables and connections |
| 2 | Connection is not established with the port to be used for VPN. | The port used for VPN connection is not connected. \rightarrow Check the cables and connections. |
| 3 | Error detected in VPN settings. *1 | The port used for VPN connection is not selected. →Check the LAN/LAN2/WLAN settings. [Domain name]/[Active ID] are not set on the [VPN Setting] screen. →Set [Domain name]/[Active ID]. There is no gateway setting. →Check the gateway. |
| 4 | There is no gateway setting. | Check the gateway. |

*1 Displayed when the VPN settings icon on the status bar is selected.

| 52 60 0 | |
|---------------|--|
| | Error detected in VPN settings. Error message IP Address for VPN: : VPN terminal name : Opencet Image: Connect |
| | Status bar |

• Errors received from the authentication server during VPN connection Reconfigure settings according to the details of the message.

V-Connect Errors

There are errors that occur due to V-Connect settings and errors received from the authentication server during VPN connection.

Reconfigure settings according to the details of the message.

Hakko Electronics Co., Ltd. www.monitouch.com

Sales 890-1, Kamikashiwano-machi, Hakusan-shi, Ishikawa, 924-0035 Japan TEL +81-76-274-2144 FAX +81-76-274-5136