SERVIS IP-KVM 1p Converter

User's Guide (for ES) Version 3.0



Revision Record

Version No	Date	Detail
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		2.5.5 Virtual Key Window: Sun keyboard, German la support 3.5.5 Copyright Notices 5.1 Trouble Shooting contents

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Introduction

Thank you for purchasing *SERVIS IP-KVM* 1p Converter (hereafter referred to as "this product").

This product is intended to enable operating the DOS/V (PC/AT compatible) and the SUN (USB) server (hereafter referred to as "host server") by keyboard, video and mouse (KVM) from remote locations via a network.

It is equipped with a server connecting port to connect a host server. It is possible to connect the KVM switch (SERVIS series) to a server connecting port. It enables operating multiple host servers connected by KVM switch from remote locations via network.

It also encodes data in a network with the data encryption function (SSL and SSH) and offers safe network communications.

This product also has virtual disk function by USB connection, which enables use of this product as a USB disk drive from host servers and realizes file to file transfer between remote terminal units and host servers.

This product has two independent power configurations (redundant) to offer a redundant power supply. It prevents system breakdown caused by disconnection of the power adapter and power cables or failure of the power supply unit and its components after in this product.

This guide provides methods for setting up, basic operations and various functions of this product.

About this Guide

This guide contains important information regarding the safe and proper use of this product.

Before using this product, please read carefully and understand the contents of this guide.

After reading, retain this guide in a safe place for future reference.

We have made every effort to ensure the safety of the users and other personnel, and to prevent property damage. When using this product, carefully follow the instructions described in this guide.

The contents of this guide are subject to change without prior notice for the purpose of improvement. If you have any questions or comments about this product and the contents of this guide, contact our maintenance service department.

CAUTION: HAZARDOUS VOLTAGE. SERVICE ENGINEER ONLY TO OPEN COVER.

CAUTION: FOR CONTINUED PROTECTOIN AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE AND RATING OF FUSE.

Precautions for Use

It is the customer's responsibility to use this product including this guide, the device, and firmware.

Fujitsu Component Limited bears no responsibility for damages or loss of data that may occur as a result of using this product. Also note that restitution for damages due to malfunctioning of this product shall not exceed the total cost of this product, regardless of the range of the damages covered by the warranty.

The firmware shipped with this product and update firmware for this product provided by Fujitsu Component Limited must not be used with systems other than this product, and must not be modified or disassembled.

Problems may occur with this product in the event of an instantaneous voltage drop of the power supply due to lightning, etc.

Notes on Maintenance

This product must not be dismantled, modified, or repaired by personnel other than our maintenance engineers. It contains dangerous, high voltage components. Contact our maintenance department for repairs.

Connection to Servers and Countermeasures against Static Electricity

When attaching/removing connectors to connect the server port of this product to a host server, ensure that host server is turned off. In addition, be sure to discharge static electricity before connecting the cables.

Twisted pair cables (e.g. LAN cables) may be charged with static electricity depending on your operating environment. Connecting twisted pair cables charged with static electricity to devices including this product could cause a malfunction or failure of the devices or their LAN ports.

Use a static eliminator or any other tool immediately before connecting, and discharge static electricity in twisted pair cables to ground wires.

Note that if the cables remain unconnected for a long time after discharging static electricity, they may be charged with static electricity again.

High Safety Measures

This Product is designed, developed and manufactured as contemplated for general use, including without limitation, general office use, personal use, household use, and ordinary industrial use, but is not designed, developed and manufactured as contemplated for use accompanying fatal risks or dangers that, unless extremely high safety is secured, could lead directly to death, personal injury, severe physical damage or other loss (hereinafter "High Safety Required Use"), including without limitation, nuclear reaction control in nuclear facility, aircraft flight control, air traffic control, mass transport control, medical life support system, missile launch control in weapon system.

You shall not use this Product without securing the sufficient safety required for the High Safety Required Use. Neither Fujitsu Component Limited nor its affiliates shall be responsible for any damages that occur to the user of this product or a third party due to the use of this product in a situation that requires advanced safety measures.

Green Products

This is a "Green Product" that has met the severe environment standards of the Fujitsu Group. It is an earth-friendly product with a low impact on the environment.

Major features

Compact and resource saving Low power consumption Lead free

For environmental efforts of the Fujitsu Group, visit the "Environmental Activities" page of the Fujitsu website (http://eco.fujitsu.com/jp/).

Disposal of this Product

Dispose of this product must no be performed by the user.

When this product is no longer necessary, contact the dealer where you purchased this product.

Conventions

The following are conventions used throughout this guide.

Font or symbol	Definition
AaBbCc123	Indicates output from this product or connected devices, which is displayed on the screen.
AaBbCc123	Indicates characters that you enter in a command line or configuration file.
Enter↓	Indicates an "Enter" key you press.
Refer to	Indicates a reference (chapter, section, and page number).
CAUTION	Indicates points to note when using this product.

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Chapter 1 - Setup

This chapter provides information of SERVIS IP-KVM device as required for its setup. Please make sure to read this manual before the operation.

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1.1. Device Components

Check and make sure the components listed below are included. Keep the original shipping box for future transport of the device.



SERVISTM IP-KVM 1p Converter FX-7001NP Main Unit ... 1



Rubber Foot...1set (4)



RJ45–D-Sub 9-pin Conversion Adapter FP-AD009RJX ... 1



RJ45–D-Sub 25-pin Conversion Adapter FP-AD025RJX ... 1



Power Adapter ... 1



CD-ROM (this guide) ... 1

1.2. Product Outline

This product is a device to connect the keyboard, mouse and video port of target device (hereinafter called Host server) to the remote terminal unit in the remote location via network.

It is also able to switch and operate the multiple host servers from the remote location by connecting to the KVM switch.



Setup

1.3. Parts and Functions

1.3.1 Rear



(1) Local Video Port

Connects the video monitor for local operation. Connector type is female Mini D-sub15 pin.

(2) Local Keyboard Port

Connects the PS/2 keyboard for local operation. Connector type is Mini-DIN6 pin.

(3) Local Mouse Port

Connects the PS/2 mouse for local operation. Connector type is Mini-DIN6 pin.

(4) Server Video Port

Connects to the host server or KVM switch to be controlled with the optional composite cable for server connection. Connector type is female Mini D-sub15 pin.

(5) Server PS/2 Port

Connects to the host server or KVM switch to be controlled with the optional composite cable for server connection. Connector type is Mini-DIN8 pin.

(6) Server USB Port

Connects to the host server to be controlled with the optional USB connection cable. Connector type is USB type B.

(7) Ethernet Port

Ethernet connector which is compliant with 10BASE-T/100BASE-TX. Both UTP and STP cables are available. Connector type is RJ45 modular jack. Refer to 4.2 RJ45 Connector Signal Assign (page 141)

(8) Console Port

For RS232 Connection. Connects to this product using this Console port and set the network at initial installation. Connector type is RJ45 modular jack.

(9) Power Adapter Connector

Connects the power adapter (DC5V input). This product can connect up to 2 power adapters, redundant configuration is supported.

(10) Ethernet Act LED

Blinks green when a data packet is sent or received by VNC connection.

(11) Ethernet Link LED

Lights up green when the Ethernet port is linked up.

(12) Power LED 2

Lights up green when the adapter is connected to power connecter 2 and power is supplied.

(13) Power LED 1

Lights up green when the adapter is connected to power connector 1 and power is supplied.

1.3.2 Front

|--|

(1) Power LED

1: Lights up green when the adapter is connected to power connector 1 and power is supplied.

2: Lights up green when the adapter is connected to power connecter 2 and power is supplied.

(2) Ethernet LED

Link: Lights up green when the Ethernet port is linked up. Act: Blinks green when a data packet is sent or received by VNC connection.

(3) USB LED

Lights up green when this product and the host server is connected by USB. Blinks green if there is keyboard or mouse input when USB keyboard/mouse are enabled.

(4) **RESET** Button

Resets the CPU when this product is active. This product will be restarted in approx. 15 seconds.

1.4. Installation Method

1.4.1 Placing On a Level Surface

When placing this product on a level surface such as desk, attach the provided rubber feet to the bottom of the device. The feet cushion shock and protect slipping.



1.4.2 Rack Mount

By using optional rack mount kit, you can mount the device on a EIA standard 19 inch rack.

Refer to 4.4 Optional Accessories (page 141)

Rack Mount Kit





Setup

1.4 Installation Method

Example of rack mount setting





Up to 2 devices can be mounted in an EIA standard 1U rack.



When mounting the product on a 19 inch rack, remove the rubber feet.

1.5. Connecting Method

1.5.1 Not Provided Necessary Components

(1) Composite cable for Server Connection (option)

Composite cable connects this product to the server or KVM switch.

(2) USB Connection Cable (option)

USB cable connects this product to the server.

(3) Video Monitor, Keyboard and Mouse for local operation.

Prepare a video monitor, keyboard and mouse for local operation. PS/2 connection is only supported for a keyboard and mouse.

(4) Serial console terminal

Prepare a PC with RS-232C interface (D-Sub 9-pin or D-sub 25-pin). This is necessary in order to set the IP address for this product at initial installation.

(5) Cat5 Cable

Prepare a Cat5 straight cable, adapted for the environment, for network connection. Any UTP or STP is acceptable; however the cable must be shorter than 20m.

(6) Switching Hubs, etc.

Prepare the routers and switching hubs for network connection.

(7) Remote Terminal Unit

Prepare a PC that supports an Ethernet connection. A terminal device to operate the host server from a remote location. <u>An environment that Java applet runs on is needed.</u> Any OS and browser are acceptable.

1.5.2 Connection to the Host Server

Connect cables to this product, as shown below.





1.5.3 KVM Switch Connection

When you combine our KVM switch and this product, connect the cables as shown below. Connect the KVM cable to the local port in the KVM switch side.



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1.5.4 Serial Console Connection

If the COM port of serial console has a D-sub 9-pin or D-sub 25-pin connector, the serial console can also be connected to this product with the optional D-sub–RJ45 conversion adapter and commercially available Cat5 straight cable.

FP-AD009RJX	The conversion adapter to configure RS-232C cross cable by combining <u>Console port</u> and Cat5 straight cable. D-Sub side is female 9-pin.
FP-AD025RJX	The conversion adapter same as FP-AD009RJX, but its D-Sub side is male 25-pin.

1. Connect the **FP-AD009RJX** conversion adapter (for D-sub9) to the serial console.



2. Connect the conversion Adapter hooked up in Step1 and Console port of this product by a Cat5 cable.



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Chapter 2 - Basic Operation

This chapter provides basic operating procedure to control the host server from a remote location via network with this product.

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2.1. Basic Operation Flow

The following provides the basic operating procedure to control the host server from a local or remote location via network with this product.

Step 1 Connect this product to the host server Connect this product to the host server and prepare for remote operation. Refer to 1.5.2 Connection to the Host Server (page 10) Step 2 Set the IP address for this product. Connect the serial console to this product and set the IP address. Refer to 2.2 Set the IP Address (For Initial Installation) (page15) Step 3 Access to this product from remote terminal. Access to this product and enter the [User Account] and [Pass Word] and log on. Refer to 2.3 Logon to this Product (page 20) Step 4 Run the Java VNC. Run the Java VNC and prepare for host server operation. Refer to 2.4 Run the Java VNC (page 25) Step 5 Operate the host server. Operate the host server from the Java VNC operating screen. Refer to 2.5 Host Server Operation from Java VNC (page 29) Step 6 Exit the VNC and log out. Exit the VNC and log out. Refer to 2.6 Exit and Log off the Java VNC (page 51) Step 7 Operate the host server locally. Connect the video monitor, keyboard and mouse, and operate the host server. Refer to 2.7 Local Operation (page 53)

2.2. Set the IP Address (For Initial Installation)

Set the IP address for this product using serial console at initial setting. The operation method is described below.

- Connect the console port of this product and the serial console terminal.
 Refer to 1.5.4 Serial Console Connection (page 12)
- 2. Run the emulator application (Tera Term, etc.) at the serial console and specify the parameter as follows.

Condition for Communication	Value
Baud Rate	115200bps
Data Length	8bit
Parity	none
Stop Bit	1bit

- 3. The "login:" prompt is displayed. Enter the default administrator account: admin.
- 4. The "password:" prompt is displayed. Enter the default admin password: admin (The password is not displayed)

login: admin	Enter₊		
password:	Enter↔		

5. The following set up menu is displayed.

```
SERVIS IP-KVM Network Setup
_____
NOTE: This interface is used to set network parameters and perform
certain recovery procedures, but the majority of setup and
configuration can only be done using the web interface.
Primary Ethernet Port (LAN)
                              (00:0e:00:ee:04:03)
 DHCP is enabled. Current lease information:
 IP Address: 192.168.0.2
    Netmask: 255.255.255.0
    Gateway: Disabled
  Broadcast: 192.168.0.255
  Machine name: noname
Default Gateway: <none> (DHCP: 192.168.0.1)
Commands (press one key, then Enter):
   D - Disable DHCP, and use fixed IP address.
   I - Set IP address.
 * N - Set netmask.
 *
   G - Set network gateway.
   B - Set broadcast address (optional).
   M - Change machine name (DHCP client name).
   H - Reset/disable firewall, TCP ports, SNMP, RADIUS.
   F - Reset everything to factory defaults.
   S - Change system admin password.
   P - Send ICMP ping packets (testing purposes).
   ? - Show TCP/IP ports and servers enabled.
   V - Show Firmware Information.
   R - Revert to current settings (undo changes).
   \ensuremath{\mathbb{W}} - Commit changes to configuration.
   Q - Logout.
   -> These values ignored due to DHCP.
Choice:
```

CAUTION

DHCP is enabled as the factory setting. Log on this product and <u>be sure to specify</u> the fixed IP address if you operate the host server from a remote location extended periods of time.

6. To assign an IP address, disable the DHCP. The "Choice:" prompt is displayed and enter "d".

Choice: **d Enter**↔

7. The following is displayed and DHCP is disabled. Press the [Enter] key.

DHCP has been disabled. Press Enter to continue... **Enter**

8. The following is displayed. Confirmed that the DHCP is disabled.

```
SERVIS IP-KVM Network Setup
_____
NOTE: This interface is used to set network parameters and perform
certain recovery procedures, but the majority of setup and
configuration can only be done using the web interface.
Primary Ethernet Port (LAN)
                              (00:0e:00:ee:04:03)
   D.H.C.P.: Disabled
 IP Address: 192.168.0.2
    Netmask: 255.255.255.0
    Gateway: Disabled
  Broadcast: 192.168.0.255
  Machine name: noname
Default Gateway: <none>
Commands (press one key, then Enter):
   D - Enable DHCP for dynamic IP address.
   I - Set IP address.
   N - Set netmask.
   G - Set network gateway.
   B - Set broadcast address (optional).
   M - Change machine name (DHCP client name).
   H - Reset/disable firewall, TCP ports, SNMP, RADIUS.
   F - Reset everything to factory defaults.
   S - Change system admin password.
   P - Send ICMP ping packets (testing purposes).
   ? - Show TCP/IP ports and servers enabled.
   V - Show Firmware Information.
   R - Revert to current settings (undo changes).
>>> W - Commit changes to configuration.
   Q - Logout.
   NOTE: Your changes are still pending.
Choice:
```

9. Specify the IP address. Enter "i" in the "Choice:" prompt.

Choice: **i Enter**↔

10. Current IP address is displayed in square bracket. Enter the new IP address and press the [Enter] key.

IP Address [192.168.0.8]: 192.168.0.100 Enter-

11. Specify the subnet mask. Enter "n" in the "Choice:" prompt.

Choice: **n Enter**↓

12. Current subnet mask is displayed in square bracket. Enter the new subnet mask and press the [Enter] key. Press the [Enter] key if the subnet mask is not changed.

```
Netmask [255.255.255.0]: 255.255.255.0 Enter+
```

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13. Specify the default gateway. Enter "g" in the "Choice:" prompt.

Choice: **g Enter**↔

14. Current default gateway is displayed in square bracket. Enter the new IP address of default gateway and press the [Enter] key.

```
Default gateway (or 0.0.0.0 for none) [0.0.0.0]: 192.168.0.1 Enter+
```

15. The "Choice:" prompt is displayed again. Enter "w" to save the new setting.

Choice: **w Enter**↔

16. The following is displayed and the setting is changed.

```
Writing... Done.
Applying settings...
eth0: IBM EMAC: link up, 100 Mbps Full Duplex, auto-negotiation complete.
eth0: IBM EMAC: MAC 00:0e:00:ee:04:03.
eth0: IBM EMAC: open completed
SNMP agent started.
Redir Server started (br0/eth0=80, eth1=0).
rhub: No such file or directory
VNC Server: Version V1L20ES
Done.
Changes commited.
Press Enter to continue...
```

17. Press the [Enter] key again after the setting and display the "Choice:" prompt. Enter "q" to log off. The "login:" prompt is displayed after the log off.

Choice: **q Enter**

Then the network setting is changed as following value.

IP address:	192.168.0.100
Subnet mask:	255.255.255.0
Default gateway:	192.168.0.1

This is the operation method to change network initial settings.

The following table shows the items can be specified from the serial console.

Command	Items
D	Switches enable/disable the DHCP setting.
1	Set the IP address.
Ν	Set the subnet mask.
G	Set the default gateway.
В	Set the broadcast address.
Μ	Set the device name.
Н	Reset/disable the Firewall and TCP port settings.
F	Reset to the factory default.
S	Set the system administrator password.
Р	Transmit the ICMP ping packet.
?	Display the TCP/IP port and the server.
V	Display the firmware information.
R	Reset to the former settings.
W	Save the current settings.
Q	Logs off the menu.

Basic Operation

Set the IP address of this product, net mask and default gateway at initial installation.

2.3. Logon to this Product

The following describes how to log on to this product from a remote terminal.

1. Start up the browser at the remote terminal and access to the specified IP address of this product by https protocols. (The following provides the procedure for Microsoft Internet Explorer 6.0.)

This product is set as follows.

- > IP Address: 192.168.0.100
- Subnet mask: 255.255.255.0
- Default Gateway: 192.168.0.1

🚰 about:blank - Microsoft Internet Explorer				
Eile Edit <u>V</u> iew F <u>a</u> vorites <u>T</u> ools <u>H</u> elp				
🕞 Back 👻 🕥 🖌 📓 🏠 🔎 Search 🤺 Favorites 🤣 🔗 - 😓 🔜 🔏				
Address https://192.168.0.100/				
https://192.168.0.100/				

2. The [Security Alert] dialogue box is displayed. Click [Yes] button.

Security Alert 🔀				
£	Information you exchange with this site cannot be viewed or changed by others. However, there is a problem with the site's security certificate.			
	The security certificate was issued by a company you have not chosen to trust. View the certificate to determine whether you want to trust the certifying authority.			
	0	The security certificate date is valid.		
	⚠	The name on the security certificate is invalid or does not match the name of the site		
	Do you want to proceed?			
		Yes No Yiew Certificate		

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3. If JavaScript is disabled in the browser setting, the following [Language Select] page is displayed. If JavaScript is disabled, this product does not operate properly.Please enable your JavaScript and click English or Japanese. If JavaScript is enabled, the [Language Select] page is not displayed.Refer to the next section 4.



Setting procedure of enabled JavaScript.



 The web page login screen is displayed. Click English or Japanese on the center of the screen to switch the language. The administrator account [admin] and the password [admin] are set by default. Enter [admin] for the user name and the password and click [Login] button.

🗿 Login Screen - Microsoft Internet Explorer	_ 8 ×			
Elle Edit View Favorites Iools Help	-			
🔇 Back + 🕥 - 🙁 😰 🏠 🔎 Search 🧙 Favorites 🚱 🍛 + 😓 🖾				
Agåress 🕘 https://192.168.0.100/login_e.html 💌 🌍 Go	Links »			
SERVIS IP-KVM(FX-7001NP Series : Version V1L20ES) This Machine is "noname"@192.168.0.100(00:e0:00:ee:04:03).				
Username Password Login				
English / <u>Japanese</u>				
Download our root public certificate				
	Ţ			
) 📓 Done	<u> </u>			

Click <u>Download our root public certificate</u> and you can download the security certificate.



If cookie is disabled, you can't login to the setting page. Please enable cookie and click [Login] button.

5. The following screen is displayed. Click the menu from the menu selection in the left and the selected contents are displayed in menu display area in the right. The server information is displayed in the menu display area in the top page. It is possible to confirm power status (on/off) and the video mode (screen resolution and refresh-rate) of the connected host server.

All management/setting for this product, besides the IP address setting in the initial installation can be specified in this web page. Log on with administrator account to specify/manage this product.

Refer to 3.1 Network Setting (page 56)


2.4. Run the Java VNC

It is necessary to run the Java VNC to operate the host server after logging on from the remote terminal.



Confirm whether the Sun Java applet is installed or not in the remote terminal to run the Java VNC.

For Internet Explorer:
Click [lools] menu \rightarrow [Internet Options] \rightarrow [Advanced] tab. Make sure that Java Sun [Use JRE 1.x.xxx for <applet> (requires restart)] is checked. (x is version No.)</applet>
Internet Option
General Security Privacy Content Connections Programs Advanced Settings: Itele HTTP 1.1 settings Ise HTTP 1.1 hrough proxy connections Ise HTTP 1.1 hrough proxy connections Ise HTTP 1.1 hrough proxy connections Ise HTTP 1.1 brough proxy connections Ise HTTP 1.1 hrough proxy connections Ise hale Automatic Image Resizing Ise habe Image download placeholders Iso how index download placeholders Show protumes
If not, Download Java software in the following web site and install it. http://www.java.com/ja/ (Download page for the Java software).

Basic Operation

- 🚰 noname (192.168.0.100): SERVIS IP-KVM 1p Converter Microsoft Internet Explorer _ 8 × <u>File E</u>dit <u>Vi</u>ew F<u>a</u>vorites <u>T</u>ools <u>H</u>elp 🔇 Back 🔹 🕗 - 💌 😰 🏠 🔎 Search 🤺 Favorites 🛛 🔗 - 😓 🖂 🖄 Address Address https://192.168.0.100/nph-the.cgi/index_e.html 💌 🔁 Go 🛛 Links 🌺 SERVIS IP-KVM (FX-7001NP Series : Version V1L20ES) This Machine is "noname"@192.168.0.100(00:e0:00:ee:04:03). ٠ Top
 VNC login
 <u>VNC login</u> (more sec
 Network Sec re) Select from a left menu the item which does a setup/work IP Ad
 and DNS
 Port Numb Port Numbers
 Firewall
 SNMP Configuration
 Security Setting
 User Management
 Idle Session Timeout
 VNC Operation Setting Monitoring Information Host power:ON Video model:800x600 @ 75Hz Setting
 <u>VNC login and</u>
 <u>Timer</u>
 <u>Disconnect all</u>
 <u>VNC users</u> <u>ب</u> • ľ Login name:admin(192.168.0.175) User(s) in Web login: admin*, User(s) in VNC login: <u>(Update state)</u> , ど Done 🔒 🔮 Internet
- 1. Click <u>VNC login (more secure)</u> in the menu-selecting area.
- 2

 [VNC login (more secure) via Java applet] screen is displayed. If the Java applet is not installed, the screen remains the same and the Java VNC is not run. Download the latest Java software. (Support Java version: JRE 5.0 Update 6, J2SE v1.4.2_11 JRE)



If the Java applet is installed, the following [Warning - Security] dialogue box is displayed. Click [Yes] button. (Dialogue window depends on Java version)

Do you want to accept the certificate from web site "*.jp" for the purpose of exchanging encrypted information? Publisher authenticity can not be verified. The security certificate was issued by a company that is not trusted The security certificate has not expired and is still valid.
Publisher authenticity can not be verified. The security certificate was issued by a company that is not trusted The security certificate has not expired and is still valid. More Details
The security certificate was issued by a company that is not trusted The security certificate has not expired and is still valid.
The security certificate has not expired and is still valid.
More Details
Yes No Always
HTTPS
Hostname Mismatch The hostname in the server security certificate does not match the name of the server.
Hostname of the URL: 192.168.0.177 Hostname from the certificate: *.jp
Do you want to proceed?
Yes No



3. Once the VNC window opens and the host server screen is displayed, operation is possible.

Refer to the next section for details about the VNC window.



If you update the Java applet, uninstall the old version, and then install the latest version.

If you don't uninstall the old version of the Java applet and you install the latest version, this product may not operate normally.

2.5. Host Server Operation from Java VNC

Starting up VNC, the following window is displayed and the host server operation is enabled.



The <u>black square cursor</u> is for the remote terminal side and white arrow is for the host server side. The host server cursor follows the remote terminal cursor's movement.





To synchronize the remote terminal and host server cursor position, disable the acceleration setting for the host server mouse.

Refer to 2.5.1 Host Server Initial Setting (page 30)

Basic Operation

2.5.1 Host Server Initial Setting

To synchronize the remote terminal and host server cursor position, disable the [Acceleration] setting and the [Move to Default Button] setting.

For Windows OS based host servers
Click [Control Panel] - [Mouse] and display the mouse properties.
→ Speed: Middle, Aceleration: None
\rightarrow Snap to default: Clear the check box
Mouse Properties
Buttons Pointers Motion Hardware
Speed
Adjust how fast your pointer moves
Slow Fast
Acceleration
Adjust how much your pointer accelerates as
Clear the check box
OK Cancel Apply
For Windows XP and Windows Server 2003
\rightarrow Motion: Middle,
Enhance Pointer precision: Clear the check box
\rightarrow Shap to: Clear the check box
Buttons Pointers Pointer Options Wheel Hardware
Motion
Select a pointer speed
Slow Fast
Enhance pointer precision
Snap To
Light diabate
Clear the check box
Display pointer trails
Short Long
Hide pointer while typing
Show location of pointer when I proce the CTPL have
2 now location of pointer when these the CTHL Key

2

Basic Operation

For RedHat Linux (GNOME) Based Host Server. Click [Preferences] - [Mouse] and display the mouse preferences.	
\rightarrow Aceleration: Middle (For slowish side)	
Mouse Preferences	
Buttons Cursors Motion	
Speed	
Acceleration: Slow Fast	
Sensitivity: Low High	
Set the speed of your pointing device.	
Drag and Drop	
Threshold: Small Large	
Set the distance you need to move your cursor before dragging an item.	
K Close	



When PS/2 keyboard/mouse is enabled and the host server is a Windows OS, The **mouse cursor is not synchronized before login to the server.**

2.5.2 VNC Menu

The following menu bar is displayed at the top of the VNC window. Menu bar buttons provide various functions.

[Num][Caps][Scr] 15 Kbps/57.1ms Menu M-Resyn Ctl-Alt-Del VirtKeys PS/2 USB KVM KVM-RST Video-RST AutoSync

VNC Menu Bar		
[Num][Caps][Scr]	Shows the LED status from the left Num Lock, Caps Lock and Scroll Lock. If the LED off, it is displayed in gray.	
15 Kbps/57.1ms	Shows current transmission capacity (baud rate) / delay time.	
Menu	Display the menu window. Refer to 2.5.3 Menu Window (page 34)	
M-Resyn	Correct the difference between host server side and remote terminal side mouse pointers position. If the USB absolute mouse enabled, the button cannot be selected.	
Ctl-Alt-Del or Strg-Alt-Entf	Input [Crtl] - [Alt] - [Delete] key to the host server. Ctl-Alt-Del button is displayed if you select "Generic or US/English" or "Japanese (106/109 keys)" in [Keyboard Mapping (for localization)].	
	Strg-Alt-Entf button is displayed if you select "German (QWERTZ layout)" in [Keyboard Mapping (for localization)].	
VirtKeys	Display the virtual key window. Refer to 2.5.5 Virtual Key Window (page 38)	
PS/2	Reset the PS/2 emulation. Use this button in case the mouse pointer or PS/2 keyboard is disabled. If the USB keyboard/mouse enabled, the button cannot be selected.	
USB	Display the USB menu window. If the device is not connecting to the host server by USB cable, the button cannot be selected.	
KVM	If using with a KVM switch, output the specified hot keys to the KVM switch. It is not displayed in default. The button is displayed if you select other than "Disable" in [Hot Key configuration of FCL KVM Switch].	
	(Refer to \parallel REF_Ref118884558 ¥r ¥h \ulcorner ¥* MERGEFORMAT \parallel 3.3.3.1 [⊥] \parallel REF_Ref118884562 ¥h \ulcorner ¥* MERGEFORMAT \parallel Hot Key configuration of FCL KVM Switch (page 85)	
KVM-RST	If using with a KVM switch, reset the KVM switch. It is not displayed in default. The button is displayed if you select other than "Disable" in [Hot Key for FCL KVM Switch setting]. Refer to 3.3.3.1 Hot Key configuration of FCL KVM Switch (page 85)	
Video-RST	Update the host server display area.	
AutoSync	Indicates the mouse pointer's automatic correction function. Click this indication to enable/disable the function. If the function disabled, the indicator is displayed in gray.	

If you use this product with a KVM switch, click [KVM] button. The following OSD screen is displayed.

(The following diagram shows the combination with SERVIS Multi and FS-1004MT).

Select the number by cursor \uparrow or \downarrow and press the Enter key. Host servers connected to the selected port are displayed and operation is enabled.



Basic Operation

2.5.3 Menu Window

Press the F7 key twice or click [Menu] button in VNC menu bar, following menu window is displayed.

I.	noname		
	[Num][Caps][Scn] 8 Kbps/57.1ms	Menu M-Resyn Ctl-Alt-Del VirtKeys PS/2 USB KVM	1
		- √	

This menu window provides various VNS connection settings.

	x
System ID	- Server Info
Mouse Resyn	Host power:ON
PS/2 Reset	Video mode:800x600 @ 60Hz
USB Menu	KB mouse I/F:PS/2USB
Video Reset	LED State:[Num][Caps][Scr]
Take Ctrl	Machine Info
Video Tune	Power In: 1:unpluged 2:pluged
VirtKeys	My IP:192.168.0.100
Disk Ctrl	Time: 1 May 2006 06:09:30 +0000
Menu Bar	- Tx Info
KVM Menu	Tx rate/delay:31 Kbps/56.4ms
	B/W:: Min Avg Fast Auto
	- Thumbnails
	Thumbnails: 1/2 1/4 1/8 1/16

The following table shows the details about the menu window.

Operation Selecting Area (Left of the menu window)		
System ID	Displays the specified system information.	
	Refer to 3.4.1 Identification (page 114)	
Mouse Resyn	Synchronises the remote terminal and host server cursor position. If the USB absolute mouse is enabled, the button is displayed in gray.	
PS/2 Reset	Reset the PS/2 emulation. Use this button in case the mouse pointer or PS/2 keyboard is disabled.	
USB Menu	Display the USB menu window. If the device is not connected to the host server by USB cable, the button is displayed in gray.	
Video Reset	Update the host server display area.	
Take Ctrl	When multiple users connect to the same system and the other user	
	establishes the control authority, takes control authority from the user.	
	Only one user can operate by keyboard and mouse.	
	Refer to 3.8 Concurrent Connection of Network Users (page 136)	
Video Tune	Displays the Video Tune window for fixing the video image.	
	It is used when video tuning is performed manually.	
	Refer to 2.5.6 Video Tune Window (page 41)	
VirtKeys	Displays the virtual keyboard that provides special key	
	(Control-Alt-Delete, etc.) for the host server.	
	Refer to 2.5.5 Virtual Key Window (page 38)	
Disk Ctrl	Displays the disk operation window to emulate the USB virtual disks.	
	Refer to 2.5.7 Disk Operation Window (page 45)	
Menu Bar	Switches display/hide the menu bar at the top of the VNC window.	
KVM Menu	Displays the KVM menu window.	
	Refer to 2.5.10 KVM Menu Window (page 49)	
Close	Closes the menu window	

Setting Display Area (Right of the menu window)		
Host power:	If the host server is on: On is displayed,	
	if the host server is off: Off is displayed.	
Video mode:	Displays the graphic mode setting for host server. (Example: 800 x	
	600 @ 60Hz)	
	If the host server is off: No power is displayed.	
KB mouse I/F:	Displays the host server keyboard and mouse are connected whether	
	PS/2 or USB.	
LED State:	Displays keyboard LED is on/off. (If the LED is off, the menu is	
	displayed in gray).	
	Indicates each LED status, [Num] for NumLock, [Caps] for CapsLock,	
	and [Scroll] for ScrollLock.	
Power In:	Displays the connecting status of the product's power port 1 and 2.	
	If the power port is connected, "plugged" is displayed and "unplugged"	
	for unconnected status.	
My IP:	Displays the IP address.	
Time:	Displays the specified current date and time.	
Tx rate/delay:	Displays current network transmission rate and delay time.	
B/W:	Specify the bandwidth control. Specify Fast: for less than 12Mbps, Avg	
	for less than 4Mbps, and Min for less than 700kbps.	
	Select "Auto" for this setting, appropriate setting is automatically	
	selected.	
Thumbnails:	Resizes the screen image from half size down to one sixteenth by	
	clicking [1/2]. [1/4], [1/8] and [1/16]. Restore the image to the original	
	size by clicking the screen.	

Basic Operation

If multiple products are set up on the same network, each VNC screens is displayed as small thumbnail images. (Select the size from [1/2], [1/4], [1/8] or [1/16] in the menu window).

This function allows control of multiple host servers.



Restore the image by clicking the thumbnail screen.

2.5.4 System ID Window

Click [System ID] in the menu window and the following system ID window is displayed.

	x
System ID	-Server Info-
Mouse Resyn	Host power:ON
PS/2 Reset	Video mode:800x600 @ 60Hz
USB Menu	KB mouse I/F:PS/2USB
Video Reset	LED State:[Num][Caps][Scr]
Take Ctrl	Machine Info
Video Tune	Power In: 1:unpluged 2:pluged
VirtKeys	My IP:192.168.0.100
Disk Ctrl	Time: 1 May 2006 06:10:23 +0000
Menu Bar	-Tx Info
KVM Menu	Tx rate/delay:12 Kbps/56.4ms
	B/W:: Min Avg Fast Auto
	- Thumbnails
	Thumbnails: 1/2 1/4 1/8 1/16

2

Display the system ID of this product specified in <u>Identification</u> in the web site.

Refer to 3.4.1 Identification (page 114)

x
Hostname:SERVIS_IP-KVM
Net Addr:192.168.0.xxx
Description: connect-to-severA
Location:Shinagawa-ku, Tokyo
Contact:xxx@fcl.fujitsu.com

System ID Window		
Hostname:	Display the ID of this product.	
Net Addr:	Display the user-defined value; the DNS name for console,	
	etc.	
Description:	Display the user-defined construction for controlled devices.	
Location:	Display installation site of this product.	
Contact:	Display the contact information; mail addresses relating to this	
	product, etc.	



2.5.5 Virtual Key Window

Click [VirtKeys] from the VNC menu bar or click [VirtKeys] in the menu window, virtual key window is displayed.



This window provides specific keys, which cannot be directly input into the host server from the remote terminal unit (Ctrl + Alt + Del for example).

	x
Help Cmps	F1 F2 F3 F4 F5 F6 F7 F8 F9 F10 F11 F12
Stop Agan	Mute Vol- Vol+ Sleep
Prop Undo	ESC Ctl-Alt-Del ¥ NumLk PrtScn ScrLk Pause Power
Frnt Copy	Caps Alt-Tab Alt-F4 Shft-Alt-Tab Alt-ESC Ctrl-ESC
Open Pste	L-Shft Shft-PrtScn Ctr1-PrtScn Alt-PrtScn R-Shft
Find Cut	L-Ctrl L-Win L-Alt R-Alt R-Win Context R-Ctrl

The layout of the virtual key window changes by "Keyboard Mapping" setup of the Web page.

Refer to 3.3.3.2 Keyboard Mapping (for localization) (page86)

The case of "Generic or US/English" or "Japanese (106/109 keys)"

	x
Help Cmps	F1 F2 F3 F4 F5 F6 F7 F8 F9 F10 F11 F12
Stop Agan	Mute Vol- Vol+ Sleep
Prop Undo	ESC Ctl-Alt-Del ¥ NumLk PrtScn ScrLk Pause Power
Frnt Copy	Caps Alt-Tab Alt-F4 Shft-Alt-Tab Alt-ESC Ctrl-ESC
Open Pste	L-Shft Shft-PrtScn Ctr1-PrtScn Alt-PrtScn R-Shft
Find Cut	L-Ctrl L-Win L-Alt R-Alt R-Win Context R-Ctrl

The case of "German (QWERTZ layout)"

	x
Help Cmps	F1 F2 F3 F4 F5 F6 F7 F8 F9 F10 F11 F12
Stop Agan	Mute Vol- Vol+ Sleep
Prop Undo	ESC Strg-Alt-Entf NumLk Druck Rollen Pause Power
Frnt Copy	Caps Alt-Tab Alt-F4 Shft-Alt-Tab Alt-ESC Ctrl-ESC
Open Pste	L-Shft Shift-Druck Ctr1-Druck Alt-Druck R-Shft
Find Cut	L-Strg L-Win L-Alt AltGr R-Win Context R-Strg

• Virtual Key Input Method

By clicking the virtual keys, the items in the square frame are input to the host server.

	x
Help Cmps	F1 F2 F3 F4 F5 F6 F7 F8 F9 F10 F11 F12
Stop Agan	Mute Vol- Vol+ Slagp
Prop Undo	ESC Ct1-Alt-Del ¥ NumLk PrtScn ScrLk Pause Power
Frnt Copy	Caps Alt-Tab Alt-F4 Shft-Alt-Tab Alt-ESC Ctrl-ESC
Open Pste	L-Shft Shft-PrtScn Ctrl-PrtScn Alt-PrtScn R-Shft
Find Cut	L-Ctrl L-Win L-Alt R-Alt R-Win Context R-Ctrl

• Usage of the Toggle Keys

The keys of the dark gray surrounded in the red in the virtual key window shown below show the toggle keys. By clicking the toggle key in the virtual key window, the key becomes a toggle key in the host server.

	x
Help Cmps	F1 F2 F3 F4 F5 F6 F7 F8 F9 F10 F11 F12
Stop Agan	Mute Vol- Vol+ Sleep
Prop Undo	ESC Ct1-Alt-Del ¥ NumLk PrtScn ScrLk Pause Power
Frnt Copy	Caps Alt-Tab Alt-F4 Shft-Alt-Tab Alt-ESC Ctrl-ESC
Open Pste	L-Shft Shft-PrtScn Ctrl-PrtScn Alt-PrtScn R-Shft
Find Cut	L-Ctrl L-Win L-Alt R-Alt R-Win Context R-Ctrl

The diagram below shows the [L-Ctrl] button clicked in the virtual key window and the key in toggle status.

	x
Help Cmps	F1 F2 F3 F4 F5 F6 F7 F8 F9 F10 F11 F12
Stop Agan	Mute Vol- Vol+ Sleep
Prop Undo	ESC Ctl-Alt-Del ¥ NumLk PrtScn ScrLk Pause Power
Frnt Copy	Caps Alt-Tab Alt-F4 Shft-Alt-Tab Alt-ESC Ctrl-ESC
Open Pste	L-Shft Shft-PrtScn Ctr1-PrtScn Alt-PrtScn R-Shft
Find Cut	L-Ctrl L-Win L-Alt R-Alt R-Win Context R-Ctrl

<u>Switch focus from the virtual key window</u> and enter "a" from the keyboard in this status, will transmit the "L-Ctrl + a" command to the host server.

Click [L-Ctrl] button in the virtual key window again, the toggled status is deactivated and the button becomes normal.



Switch focus from the virtual key window to enter commands to the host server from the keyboard.

• Virtual Keys for Sun PC

The key surrounded in the blue in the virtual key window shown below is a key corresponding to a Sun keyboard.

	x
Help Cmps	F1 F2 F3 F4 F5 F6 F7 F8 F9 F10 F11 F12
Stop Agan	Mute Vol- Vol+ Sleep
Prop Undo	ESC Ct1-Alt-Del ¥ NumLk PrtScn ScrLk Pause Power
Frnt Copy	Caps Alt-Tab Alt-F4 Shft-Alt-Tab Alt-ESC Ctrl-ESC
Open Pste	L-Shft Shft-PrtScn Ctrl-PrtScn Alt-PrtScn R-Shft
Find Cut	L-Ctrl L-Win L-Alt R-Alt R-Win Context R-Ctrl

Key	Contents
Mute	Input [Mute] key to the host server.
Vol-	Input [Vol-] key to the host server.
Vol+	Input [Vol+] key to the host server.
Sleep	Input [Sleep] key to the host server.
Help	Input [Help] key to the host server. (Toggle Key)
Cmps	Input [Compose] key to the host server. (Toggle Key)
Stop	Input [Stop] key to the host server. (Toggle Key)
Again	Input [Again] key to the host server. (Toggle Key)
Prop	Input [Props] key to the host server. (Toggle Key)
Undo	Input [Undo] key to the host server. (Toggle Key)
Frnt	Input [Front] key to the host server. (Toggle Key)
Сору	Input [Copy] key to the host server. (Toggle Key)
Open	Input [Open] key to the host server. (Toggle Key)
Pste	Input [Paste] key to the host server. (Toggle Key)
Find	Input [Find] key to the host server. (Toggle Key)
Cut	Input [Cut] key to the host server. (Toggle Key)

These keys are displayed in gray if you connect by PS/2 and select "Disable" in [Hot Key configuration of FCL KVM Switch].

Refer to 3.3.3.1	Hot Key configuration of	f FCL KVM Switch (page) 85)
------------------	--------------------------	------------------------	------------------

	x
Help Cmps	F1 F2 F3 F4 F5 F6 F7 F8 F9 F10 F11 F12
Stop Agan	Mute Vol- Vol+ Sleep
Prop Undo	ESC Ct1-Alt-Del ¥ NunLk PrtScn ScrLk Pause Power
Frnt Copy	Caps Alt-Tab Alt-F4 Shft-Alt-Tab Alt-ESC Ctrl-ESC
Open Pste	L-Shft Shft-PrtScn Ctr1-PrtScn Alt-PrtScn R-Shft
Find Cut	L-Ctrl L-Win L-Alt R-Alt R-Win Context R-Ctrl

Click [X] button to close the virtual key window.



Even if the Ctrl + Alt+ Del key is entered from the remote PC, the command is not transmitted to the host server.

Click [Crtl + Alt + Del] key from virtual key window to command the host server.

2.5.6 Video Tune Window

Click [Video Tune] in the menu window and the following Video Tune window is displayed. Refer to the following chapter for details about Video Tunes.

	x
System ID	-Server Info
Mouse Resyn	Host power:ON
PS/2 Reset	Video mode:800x600 @ 60Hz
USB Menu	KB mouse I/F:PS/2USB
Video Reset	LED State:[Num][Caps][Scr]
Take Ctrl	-Machine Info
Video Tune	Power In: 1:unpluged 2:pluged
VirtKeys	My IP:192.168.0.100
Disk Ctrl	Time: 1 May 2006 06:12:01 +0000
Menu Bar	-Tx Info
KVM Menu	Tx rate/delay:
	B/W:: Min Avg Fast Auto
	- Thumbnails
	Thumbnails: 1/2 1/4 1/8 1/16

Use this window to fix the video images.

			x		
efault	Auto	Save			
actory	Auto	Save	Advanced		
Current phase:23/32			Auto		
Changes/frame:6.08		Auto Everything			
-Noise Filter					
On Off 🛧 🕂 Filtering:Off					
	efault actory 3/32 .08 Filte	efault Auto actory Auto 3/32 Auto .08 Auto B Filtering:0	efault Auto Save actory Auto Save 3/32 Auto .08 Auto Everyth Filtering:Off		

Basic Operation

SERVIS IP-KVM

1p Converter User's Guide The following table provides description for every particular item in the window.

-H-V Position-	
+	Moves the host server screen to the left.
→	Moves the host server screen to the right.
1	Moves the host server screen to the top.
↓	Moves the host server screen to the bottom.
Default	Moves the host server screen to the default position.
Auto	Automatically corrects the display position in the host server display area.
Save	Saves the current host server screen position,

– Color Offset	& Gain
Factory	Back to the factory default setting.
Auto	Automatically corrects the Color Offset value based on the test pattern.
Save	Saves the current Color Offset value.
Advanced	Displays the advanced settings screen for the video image and enables to fix the value manually.

- Sampling Phas	5e	
Auto	Automatically adjusts the video signal phase.	

—All Settings ———			
Auto Everything	Adjusts Picture Positioning, Phase automatically.	Color Offset & G	ain, and Sampling

- Noise Filter-	
On	Enables filtering the video signal noise.
Off	Disables the filtering function.
1	Raise the filtering level. Click \uparrow or \downarrow button to adjust the filtering level.
Ŧ	Decrease the filtering level.
x	Close the [Video Tune] screen.



Click [Advanced] button in the [Video Tune] window, the following setting window is displayed.

This window provides the manual advanced setting for image quality.

		x		
- Presets				
1 2 3 4 5 6 7 8 9 10	11 12 13 14 15	16 Factory		
- color offset & Gam-				
Red	Green	Blue		
Offset: [«- 62 +»] def	[«- 62 +»] def	[«- 66 +»] def		
+2 mV	+2 mV	-8 mV		
Gain: [«-102+»] def	[«-102 +»] <u>def</u>	[« - 102 + »] def		
700 mV	700 mV	700 mV		
Save->Preset Auto Offset &	Gain			
— Sampling phase —				
Sampling phase: $23/32 = 258$	<pre>3° [«-Auto+»]</pre>			
-Performance				
Changes/frame:-nil- Flatness:74.9%				
For Debug				
Regrab screen Show diffs				

- Presets			
1 _ 16	Save up to 16 video settings. If the setting is saved, the button is displayed. If not, the button is displayed in gray.		
Factory Changes the video setting back to the factory default settings.			
— Color Offset & Gair			
Offset	Manually specify the offset.		
Gain	Manually specify the gain.		
def	Reset to the default setting.		
Save->Preset	Click this button and presets number button; current setting is saved to the specified number.		
Auto Offset & Gain	The offset and gain is automatically set.		
— Sampling phase ——			
[«-Auto+»]	Manually specify the sampling phase.		
- For Debug			
Regrab screen	Redisplay all the parts in the screen.		
Show diffs	Display the updated parts.		
X	Close the advanced settings screen for the video image.		

Refer to https://IP address for this product/images/pattern.png for the test pattern used in Color Offset tuning.



Save this test pattern in the host server as a png file. To set the [Color Offset & Gain] in the Video Tune window, display this test pattern in the host server screen.

2.5.7 Disk Operation Window

Click [Disk Ctrl] in the menu window and the following virtual disk operation window is displayed. (It is necessary to be connected with an USB cable.)

	x
System ID	-Server Info
Mouse Resyn	Host power:ON
PS/2 Reset	Video mode:800x600 @ 60Hz
USB Menu	KB mouse I/F: PS/2 USB
Video Reset	LED State:[Num][Caps][Scr]
Take Ctrl	-Machine Info
Video Tune	Power In: 1:unpluged 2:pluged
VirtKeys	My IP:192.168.0.100
Disk Ctrl	Time: 1 May 2006 06:13:40 +0000
Menu	-Tx Info
KVM Menu	Tx rate/delay:4 Kbps/56.4ms
	B/W:: Min Avg Fast Auto
	- Thumbnails
	Thumbnails: 1/2 1/4 1/8 1/16

2

This window displays the USB virtual disk status and whether it is inserted or ejected.

x
Status:Inserted: 1.44M Floppy
Access:1/0 (r/w)
Insert Eject USB Replug

Disk Ctrl Window	
Status:	Displays whether virtual disk is inserted or ejected.
	Ejected: Host server does not recognize the virtual disk.
	Inserted: Host server recognizes the virtual disk.
Access:	Displays the USB disk type (CD-ROM, 8M RAM, and Floppy).
Insert	Inserts the virtual disk. (The menu is displayed in gray while the disk is inserted).
	This makes the host server recognize the virtual disk.
Eject	Ejects the virtual disk. (The menu is displayed in gray while the disk is not inserted).
	This makes a remote user access the virtual disk.
USB Replug	Disconnects the USB connection and connect again.
x	Closes the [Disk Operation] window.

Refer to the following section for further details about the virtual disk. Refer to 3.3.4 Virtual Disk Setting (page 91)

2.5.8 Take Control Window

If an user is already operating the host server when another user try VNC connection, the latter user can only monitor the screen, but cannot operate the keyboard and mouse.

If you move the mouse cursor or press the keys on the VNC screen area, the following dialogue box is displayed.

View-only acces	s. Mouse and	keyboard are	ignored.
	Take control	now	

Click [Take control now] button and the following dialogue is displayed, and then you can obtain the host server control authority.

You	now	have	mouse	and	keyboard	control.

You can also obtain the operating authority by clicking [Take Ctrl] from the menu window.

	X
System ID	-Server Info
Mouse Resyn	Host power:ON
PS/2 Reset	Video mode:800x600 @ 60Hz
USB Menu	KB mouse I/F:PS/2USB
Video Reset	LED State:[Num][Caps][Scr]
Take Ctrl	Machine Info
Video ^G Tune	Power In: 1:unpluged 2:pluged
VirtKeys	My IP:192.168.0.100
Disk Ctrl	Time: 1 May 2006 06:17:48 +0000
Menu Bar	-Tx Info
KVM Menu	Tx rate/delay:1 Kbps/56.4ms
	B/W:: Min Avg Fast Auto
	- Thumbnails
	Thumbnails: 1/2 1/4 1/8 1/16

2.5.9 USB Setting Window

Click [USB] on the VNC menu bar to display the USB setting window.



This window sets USB keyboards, mouse and storages.

	x
-USB Device Change	
Keyboard, Mouse, Storage:	Set
Keyboard, Mouse:	Set
Keyboard :	Set
-Mouse Operate Mode	
ABS REL	
-USB Replug	
USB Replug:	do

USB Setting Window	
-USB Device Change-	
Select one USB device se	tting from the following three.
The selected button is disp	blayed.
Keyboard, Mouse,	Click [Set] button to enable USB keyboard, USB mouse and USB
Storage :	virtual disk.
Keyboard, Mouse :	Click [Set] button to enable USB keyboard and USB mouse.
-	(Default setting)
	USB virtual disk is disabled.
Keyboard :	Click [Set] button to enable only USB keyboard.
•	USB mouse and virtual disk are disabled.
-Mouse Operate Mode	
ABS	It shows the absolute mouse is enabled.
	If the relative-value mouse is enabled, the button is displayed in
	gray.
REL	It shows the relative-value mouse is enabled. (Default setting)
	If the absolute-value mouse is enabled, the button is displayed in
	gray.
-USB Replug	
USB Replug :	Click [do] button to simulate connect and disconnect of the USB
1 0	connector.
	This button fixes error in case an access error occurred in the host
	server.
x	Close the USB Menu window.

Basic Operation

If the host server is rebooted, USB virtual disk function will be "Disable" automatically.

When you use USB virtual disk function again after the host server starts, please set USB Device setup as [Keyboard, Mouse, Storage].

X
- USB Device Change
Keyboard, Mouse, Storage: Set
Keyboard, Mouse: Sev
Keyboard : Set
-Mouse Operate Mode
ABS REL
- USB Replug
USB Replug: do

2.5.10 KVM Menu Window

Click the [KVM Menu] in the VNC menu bar and the following KVM hot key setting window is displayed.

	x
System ID	-Server Info
Mouse Resyn	Host power:ON
PS/2 Reset	Video mode:800x600 @ 60Hz
USB Menu	KB mouse I/F:PS/2USB
Video Reset	LED State:[Num][Caps][Scr]
Take Ctrl	-Machine Info
Video Tune	Power In: 1:unpluged 2:pluged
VirtKeys	My IP:192.168.0.100
Disk Ctrl	Time: 1 May 2006 06:21:11 +0000
Menu Bar	-Tx Info
KVM Menu	Tx rate/delay:2 Kbps/56.4ms
	B/W:: Min Avg Fast Auto
	- Thumbnails
	Thumbnails: 1/2 1/4 1/8 1/16

Input hot keys to the connected KVM switch from this window.

x
- Hot Keys(KVM)
SERVER SELECT: Ctrl+Shft+Alt Ctrlx2 Scrlkx2
SHOW SERVER NAME : On/Off
MULTIUSER ACCESS : LogOn
LogOff(Alt+Scrlkx2) LogOff(Ctrl+Capsx2)
— Hot Key(SERVIS,SERVIS Multi Only)
INIT SERVER NAME: Init

KVM Hot Key Setting Window	
- Hot Keys(KVM)	
SERVER SELECT:	Click [Ctrl+Shift+Alt] button to display the server select
	screen.
	Click [Ctrl x 2] button to enter the server select mode.
	Click [Scroll Lock x 2] button to display the server select
	screen.
SHOW SERVER NAME:	Click [On/Off] button to switch always display / not display the
	server name in the top-left of the host server screen.
MULTIUSER ACCESS:	Click [Log On] button to display the log on screen.
	Click [LogOff (Alt+Scroll x 2)] button to log off the KVM
	switch-setting screen.
	Click [LogOff (Ctrl+Caps x 2)] button to log off the KVM
	switch-setting screen.
— Hot Key(SERVIS, SERVIS	Multi Only)
INIT SERVER NAME:	Click [Init] button to reset the server name in the top-left of the
	host server screen.
— Close —	
x	Close the KVM hot key setting window.

Hot keys to be used depend on the connected KVM switch models. Refer to the KVM switch instruction about hot key specifications.

2.6. Exit and Log off the Java VNC

Exit the VNC connection after finishing the operation to the host server. Then log off of the web site.

1. Click [x] button in top right of the Java VNC window to exit the VNC.



 Click <u>logout</u> from the menu selection area in the web site. The session is over and the log on screen is displayed again.



Click Login again to return to the log on screen again.

2

Basic Operation

2.7. Local Operation

Connect video monitor, keyboard and mouse to the local port for local host server operation.

Even if the remote terminal cannot access this product because of network errors, it is possible to connect to the local port and operate the host server.

Only PS/2-compliant keyboard and mouse can be connected.



Refer to 1.5.2 Connection to the Host Server (page 10)

The Video monitor, keyboard, and mouse should be left unconnected during normal operation and only be connected when necessary.

Refer to the following section about information for when an online user and a local user operate the host server concurrently. \square Refer to 3.3.1.4 VNC Idle Timeout (page 80)



As restriction, local connected keyboard LEDs (NumLock, CapsLock and ScrollLock) is not lit up. However, the self-luminous keyboard is excluded.

MEMO

Chapter 3 - Function Details

This chapter provides the function details of the product.

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3.1. Network Setting

The network setting for this product is performed on web page (for initial installation, it is specified from the serial console).

Refer to the following sections for each item of network settings.



3.1.1 IP Address and DNS

Click <u>IP Address and DNS Configuration</u> from the menu selecting area and following setting menu is displayed.

The IP address and DNS of this product can be changed in this menu.

noname (192.168.0.100): SERVIS IP-KVM I	ip Converter - Microsoft Internet Explorer			-0
e Edit View Favorites Icols Help				
) Back + 🐑 - 🖹 😰 🔥 🔎 S	iearch 🐈 Favorites 🕢 🗟 + 😓 🗔 🕉			
kress 📓 https://192.168.0.100/nph-the.ogi/no	fex_e.html		💌 🛃 Go	Links
Thi	SERVIS IP-KVM (FX-7001NP Series : Ve s Machine is "noname"@192.168.0.100(ersion V1L20ES) 00:e0:00:ee:04:03),		
VNC login VNC login (more secure)	IP Address and DNS Config	uration		
 Network Setting IP address 	DHCP Configuration			
and DNS	Automatic network configuration usin	g DHCP is: Disabled		
 Port Numbers Firewall 	IP Addresses and Routing			
SNMP Configuration				
 Security Setting 	These values will only be used if DHC	P is disabled.		
<u>User</u> Management	Port	LAN		
Idle Session	IP Address	192.168.0.100		
VNC Operation	Subnet mask	255.255.255.0		
Setting - VNC login and	Gateway (or 0.0.0.0 for none)	192.168.0.1		
Timer	Broadcast (or leave blank)	192.168.0.255		
Disconnect all VNC users	Domain Name Server (optional)			
.ogin name:admin(192.168.0.175)		1		
Jser(s) in VNC login: <u>(Update stat</u>)	<u>e)</u>			
Done			🕒 🔵 Internet	

IP Address and DNS Configuration

DHCP Configuration

Automatic network configuration using DHCP is: Disabled

IP Addresses and Routing

These values will only be used if DHCP is disabled.

Port	LAN
IP Address	192.168.0.100
Subnet mask	255.255.255.0
Gateway (or 0.0.0.0 for none)	192.168.0.1
Broadcast (or leave blank)	192.168.0.255

Domain Name Server (optional)

DNS Servers (example: 10.0.0.123,10.2.3.34)	
Default DNS domain suffix (example: fcl.fujitsu.com)	

Commit Network Changes

Click here to save your changes (they will be applied on next reboot).

Click here to reconfigure network settings immediately. Make changes effective now ٠

3

Function Details

•

Select enabled/disabled from the list for setting the IP address dynamic allocation by DHCP as shown below.



When DHCP is enabled, [Current DHCP lease information] is displayed as shown below.

	comgaration
DHCP Configuration	
Automatic network configur	ation using DHCP is: Enabled 💌
	ation
Current DHCP lease inform	iauon;
router=192.168.0.1	
Current DHCP lease inform router=192.168.0.1 subnet=255.255.255.0 dhcptype=5	

When DHCP is disabled, input the following settings to the web page.

se values will only be	used if DHCP is disa	abled.	
Port		LAN	
P Address		192.168.0.100	
Subnet mask		255.255.255.0	
Gateway (or 0.0.0.0 for nor	1e)	192.168.0.1	
Broadcast (or leave blank)		192.168.0.255	

After inputting the setting, click [Commit] button. The following message is displayed and the settings are saved.



Click [Make changes effective now] button. The following message is displayed and the changed settings applied.





Make sure to specify the fixed IP address when you log on this product and operate for a long periods.

3

Function Details

3.1.2 Port Numbers

Click <u>Port Numbers</u> from the menu-selecting area, the following setting page is displayed.

Network port numbers can be changed on this page.

dress 💽 https://192.160.0.100/nph-the.cg/index S This !	ebtni ERVIS IP-KVM (FX- Machine is "noname	-7001NP Series : Ver e*@192.168.0.100(0	sion V1L20ES) 0:e0:00:ee:04:03).	💌 🔁 Go 🛛 Links '
<u>Top</u> VNC login <u>VNC login</u> (more secure) Network Setting	Port Number	'S ort (192.168.0.100)		2
and DNS	Service	Default	Current Port	
 Port Numbers Firewall 	ssh	22	22	
SNMP Configuration	http	90	80	
 Security Setting 	snmp	161	161	
User Management	https	443	443	
 Idle Session 	vnc	5900	5900	
 VNC Operation 	vnes	15900	15900	
• VNC login and Timer • Disconnect all <u>VNC users</u>	Click here to save Commit Chang Click here to save	e your changes (they ges e your changes, and n	will be applied on next reboot) estart all network servers.	
ogin name:admin(192.168.0.175) Iser(s) in Web login: admin*, Iser(s) in VNC login: <u>(Lodate state)</u> Isea			1	internet

Port Numbers

LAN: Ethernet Port (192.168.0.100)

Service	Default	Current Port	
ssh	22	22	
http	80	80	
snmp	161	161	
https	443	443	
vnc	5900	5900	
vncs	15900	15900	

٠

Click here to save your changes (they will be applied on next reboot).

Click here to save your changes, and restart all network servers.
Restart Servers
The following table shows the network servers currently running on this product. This function enables to disable some of these services and set any network port number.

Service	Explanation	Default Network Port Number
ssh	Secure Shell	22
http	HyperText Transfer Protocol	80
snmp	Simple Network Management Protocol (UDP)	161
https	Hypertext Transfer Protocol Security (SSL encryption)	443
vnc	VNC/RFB Protocol	5900
vncs	VNC (SSL encryption)	15900

Specify "0" for the port number to disable the service.

After inputting the port number, click [Commit Changes] button. The following message is displayed and the setting is saved.

Changes committed. They will take effect at next restart.

Wait 3 seconds to continue, or click here.

After inputting the port number, click [Restart Servers] button. The following message is displayed and the network servers are restarted.



Specify the efficient port number between 1 and 65535. The network port number must be the unique number in the IP address. Local Host: 127.0.0.1

Only the running process on this product can receive the following ports. The following ports do not accept external access and cannot change the number. These numbers will be required after ssh establishes the tunnel connection. Note that all services use default port numbers.

Service	Explanation	Default Network Port Number
http	HyperText Transfer Protocol	80
snmp	Simple Network Management Protocol (UDP)	161
vnc	VNC/RFB Protocol	5900

3.1.3 Firewall

Click <u>Firewall</u> from the menu-selecting area, the following setting page is displayed. Security items are set in this page.



The internal Firewall function is supported to protect the network. If this function is enabled, the hosts on authorized list can access the server, but all packets from an unauthorized host are omitted.

Authorized addresses or unauthorized addresses can be listed. Enter the particular IP address, network range or host name.

Separate by commas to specify multiple addresses. (Example: 192.168.0.101, 192.168.0.102)

Firewall

WARNING: Be careful not to lock yourself out! Be certain that 192.168.0.175 will be accepted by your filter!

Internal firewall for source IP checking: Disabled

Accept	Enabled
Reject	

Click here to save your changes and apply them: **Commit**

The firewall is set to "Enabled" and enters the IP addresses, and then click [Commit] button. The following message is displayed and the setting is reflected.



3.1.4 SNMP Configuration

Click <u>SNMP Configuration</u> from the menu-selecting area, the following setting page is displayed. Enable/disable of the SNMP function and SNMP agent are set in this page.

Iop Index Idea U Control Contro Control Control Control Control Control Control Control Control C	arch 📩 Favorites 🕢 🔗 🦫 [
Top VNC login <u>VNC login</u> (<u>More secure</u>) Network Setting		2 3
This VNC login (more secure) Network Setting 1P Address	Ce.html SERVIS IP-KVM (FX-7001N	v ♥ wies **
Top VNC login • <u>VNC login</u> (more secure) Network Setting • IP Address	Machine is "noname"@192	2.168.0.100(00:e0:00:ee:04:03).
Ar-out Saa and DNS Port.Numbers Firewall SNMP	SNMP Agent Confi SNMP Configuration Using SNMP : Enabled =	iguration
Security Setting User Management	automatically.	ettings are changed, sivill become endoled —
VNC Operation Setting	Read-only Community	Isublic
<u>VNC login and</u> <u>Timer</u> Disconnect all	Agent Identification	,
VNC users	Location Unknow	m Inceding?
name:admin(192.160.0.175) s) in Web login: admin*, s) in VNC login: <u>(Update state)</u>		1
		📄 🕒 🙆 🕐 Internet
		\checkmark
NOTE: If the automatically Communities Read-only Co Read-write C	following setting y. ommunity community	gs are changed, SNMP will become enabled
Agent Identif	ication	
Location	Unknown locat	ion?
Contact Nam	ne No contact?	
Traps		
Tran/Inform	Community	public
l u ab/minouu	(primary)	
Trap Sink 1 ((secondary)	
Trap Sink 1 (Trap Sink 2 (

1

SNMP Agent Configuration

Enable/disable of the SNMP is set in this page. Select enabled/disabled from the list. The following message is displayed and the setting is applied.

٠

	SNMP Agent Configuration
L	SNMP Configuration
	Using SNMP : Enabled Enabled Disabled

SNMP Setting is changed.

Wait 3 seconds to continue, or click here.

Communities

Read-only Community

This community allows reading, writing and changing all values. If community name is not specified in this item, the reading access is disabled. Default name is "public".

Read-write Community

This community allows reading all values and performing all changes. Specify a unique value in this item and keep it secret for security reasons. If you know the value, you can control all systems of this product. Keep this item empty to disable SNMP writing access.

Agent Identification

Location

This item is transmitted as system.sysLocation value. Describe the location of this product.

Contact Name

This item is transmitted as system.sysContact value. Describe who will receive notification about this product. It usually includes e-mail address.

Traps

Trap/Inform Community

Use the community in this item when transmitting the trap message. Specify the community in the trap server.

Trap Sink 1 (primary)

This host receives all the trap reports and information messages. This address must be specified with numerical characters.

Trap Sink 2 (secondary)

If this item is specified this host server, it also receives all the trap reports and information messages. This address must be specified with numerical characters. If it is not necessary, keep this item empty.

Click [Commit] button. The following message is displayed and the SNMP setting is changed.

SNMP changes committed and applied.

Wait 3 seconds to continue, or click here.

MIB – Management Information Base

Click <u>Output MIB for this device</u> to display the MIB copy of this product. SNMP shows the operating method for this product. It provides reading status, power on/of, reset operation, changing system configuration and user account management of connected devices. Other detail for normal network management is supported by standard MIB-2 definition.



If SNMP function is not "Enabled", SNMP is inactive.

When SNMP function is "Disabled", if you input one setup of Communities, Agent Identification, and Traps and click [commit] button, SNMP function will be in "Enabled" state.

Function Details

3.2. Security Setting

Refer to the following sections for each item of security settings.



3.2.1 User Management

Click <u>User Management</u> from the menu-selecting area, the following setting page is displayed.

User account settings are set in this page.

yees Favorites Tools Help				27			
• 🕤 • 💌 😰 🏠 🔎 Sean	ch 🧙 Favorites 😧 😥 - 😓 🗔 e.Honi	3	78	Go Links ³⁴			
SI	ERVIS IP-KVM (FX-7001NF	Series : Version V1L20ES)				
This M	Machine is "noname"@192.	168.0.100(00:e0:00:ee:04:	03).				
op NC login				î			
<u>VNC login</u> (more secure)	User Management						
IP Address and DNS	Current Users						
Port Numbers Firewall SNMP	# Usemame (None	yet)	Delete user				
Configuration ecurity Setting	Edit User Details			_			
Management Idle Session	Username						
INC Operation Setting	Password Password(Again)						
<u>VNC login and</u> <u>Timer</u> Disconnect all		Record changes					
VNC users	Administrator Password			-			
ame:admin(192.160.0.175) in Web login: admin*,		1					
in VNC login: (Update state)			0.0				
		14	🖄 🚭 Interne	t			
User Man	agement					 	
User Man Current Use	agement rs						
User Man Current Use	agement rs ame			Delete	user		
User Man Current Use	agement rs ame (None ye	et)		Delete	user		
User Man Current Use #Usern Edit User De	agement rs ame (None ya	et)		Delete	user	 	
User Man Current Use # Usern Edit User De	agement rs ame (None ye tails	et)		Delete	user		
User Man Current Use Usern Edit User De	agement rs ame (None ye :tails	et)		Delete	user		
User Man Current Use # Usern Edit User De Username Password	agement rs ame (None ya	et)		Delete	user		
User Man Current Use # Usern Edit User De Username Password Password(A	agement rs ame (None ye tails	et)		Delete	user		
User Man Current Use Username Password Password(A	agement rs ame (None ye tails gain)	et)		Delete	user		
User Man Current Use # Usern Edit User De Username Password Password(A	agement rs ame (None ye :tails gain)	et)	anges	Delete	user		
User Man Current Use # Usern Edit User De Username Password Password(A	agement rs ame (None ye stails gain)	et)	anges	Delete	user		
User Man Current Use # Usern Edit User De Username Password Password Administrato	agement rs ame (None ye tails gain) or Password	et)	anges	Delete	user		
User Man Current Use Edit User De Username Password Password Administrato	agement rs ame (None ye stails gain) or Password	et)	anges	Delete	user		
User Man Current Use # Usern Edit User De Username Password Password Administrato Admin pass	agement rs ame (None ya stails gain) or Password sword sword (Again)	et)	anges	Delete	user		
User Mani Current Use	agement rs ame (None ye tails gain) or Password sword sword(Again)	et) Record cha	anges	Delete	User		
User Mani Current Use	agement rs ame (None ye tails gain) or Password sword(Again)	et) Record cha Set admin p	anges	Delete	user		

Account for administrator is set as "root", "admin" and "administrator" by default. Account for administrator cannot be added or changed.

3.2.1.1 Edit User Details

Enter User name and password and click [Record Changes] button to add general users.

Username	test
Password	
Password(Again)	

The following screen is displayed and the user is registered.

User `test' added successfully.
Wait 3 seconds to continue, or click here.

The registered users are displayed as follows.

User N	lanagement		
Current	Users		
#	Username	Delete user	

Refer to following section about authorized operations for general users. Refer to 3.7 Operation for General User (page 135)

Click [Delete] button in the user list to delete the registered user.

ser	Management	
	-	
IRROT	at Lloore	
ırrer	nt Users	
ırrer #	nt Users Username	Delete user

The following screen is displayed and the user is deleted.

User `test' deleted successfully	
Wait 3 seconds to continue, or click here.	

3

L

3.2.1.2 Changing Password for Administrator

The administrator's password (default: admin) can be changed. It is recommended to change the administrator's password for the security of the system.

Enter new password and click [Set admin password] button.

admin password	•••••
admin password(Again)	
imin password(Again)	
	Pot a day's a second

The following message is displayed and the password is changed.

<u>Vait 3 second</u>	<u>s to continue, c</u>	<u>or click here.</u>		

3

3.2.2 Idle Session Timeout

Shut down the user connection after a certain period of time without using log on session. (Default setting: 15 minutes)

Enter the numerical characters (by the minute) in the [Idle logout time] text box. Click the [Commit Change] button to apply the setting. Specify the value between 1 and 360 minutes.

Idle Session Timeo	ut		
Idle logout time:	15 minutes	Commit Change	

If a value besides 1 to 360 is entered, the following error message is displayed and the setting is not changed.

Value is out of range (1360). Try again.	
<u>Walt 3 seconds to continue, or click here.</u>	

3.3. VNC Operation Setting

Refer to the following sections for each item in VNC Operation Setting.



3 Function Details

SERVIS IP-KVM

1p Converter User's Guide

3.3.1 VNC login and Timer

noname (192.160.0.100): SERVES IP-KVM 1p i	onvester - Microsoft Internet Diplorer
de Edit View Payonites Icols Help	
🌏 Back • 🕞 - 💌 📓 🏠 🔎 Sea	ch 👷 Pavortes 🚱 🔗 🌭 🗔 🖏
järess 🕘 https://192.168.0.100/nph-the.og/index	e.html 👱 🔁 Go Links '
S This	ERVIS IP-KVM (FX-7001NP Series : Version V1L20ES) Machine is "noname"@192.168.0.100(00::00:00::e0:04:03).
Liser Management Idle Seasion Ilmacut Vinc Operation Setting Oreconstant Disconnect all Vinc Users Keyboard/Mouse Set Josefs Keyboard/Mouse Set Users Keyboard/Mouse Set Users Set Users Set Users Set date & time Information Basis Information	VNC login and Timer Display VNC login (faster) Display VNC login (faster) at menu item: Reject S VNC Password Policy Disabled (default) S Access Sharing Policy Disabled - Use regular give/take method (default) S VNC Idle Timeout Timeout time: 5 seconds Commit Change
Login name:admin(192.160.0.175) User(s) in Web login: admin*, User(s) in VNC login: <u>(Update state)</u> Done	i i i i i i i i i i i i i i i i i i i

VNC login and Timer	
Display VNC login (faster)	
Display VNC login (faster) at menu item: Reject 💌	
VNC Password Policy	
Disabled (default)	
Trust SSH Tunnels (default) 💌	
Access Sharing Policy	
Disabled - Use regular give/take method (default)	
VNC Idle Timeout	
Timeout time: 5 seconds Commit Change	

3.3.1.1 Display VNC login (faster)

Set display/nondisplay the link for VNC connecting without SSL encryption. Select the Reject / Accept from the list. (Default is [Reject].) The selected setting is reflected immediately.



The item "VNC Login (faster)" is displayed after selecting "Accept" as shown below.



Clicking "VNC Login (faster)" and VNC connection is performed without encryption.

Keep in mind are inferior in respect of security.

3.3.1.2 VNC Password Policy

(1) VNC Password Setting

To establish a new VNC connection, it is necessary to authenticate the remote user.

Standard VNC protocol does not support "user name", but does support password.

This setting allows the use of the VNC login screen, which requires a user name and password.

Select enabled/disabled the function from the list as shown below. The selected setting is reflected immediately.

VNC Password Policy		
Disabled (default) Disabled (default) Use VNC login screen Use VNC login screen Use VNC login screen Use VNC login screen		

Select [Use VNC login screen] and start up the VNC, the following login screen is displayed.

*		
a including		
		쉐
l	Jsername	
F	Password	
	Login	
_		
	Ν	
	<mark>ьс</mark>	
41		
N Jacobat Window		
Java Applet Willium		

Enter username and password in the login window and click [Login] button. The log on certification is performed and the host server screen is displayed.

(2) SSH Tunnel Setting

If the VNC connection is transmitted via SSH tunnel, the combination of the SSH user name and password are used for certification. Consequently, there is no need to enter the password. Make sure not to use this function when the SSH client machine is not safe and there is a possibility other users use the SSH tunnel.

Select enabled/disabled the function from the following lists. The selected setting is reflected immediately.

VNC Password Policy
Disabled (default) 💌
Trust SSH Tunnels (default) Disabled CCUSS SHEITING'S (default)

3.3.1.3 Access Sharing Policy

Specify the access setting when multiple remote users perform VNC connection at the same time. Select enabled/disabled from the list as below and the setting is reflected immediately.

Access Sharing Policy	
Disabled - Use regular give/take method (default)	
Disabled - Use regular give/take method (default)	
VNEnforce single-user access policy (visible screen)	
* Enforce single-user access policy (blank screen contents)	

- Disabled Use regular give/take method (default) In case you do not have control, click-left on the VNS window display area to obtain the control.
- Enforce single user access policy (visible screen) When a user is connected to the VNC, other remote users are only allowed to view the screen. Other users are not allowed to obtain the control.
- Enforce single user access policy (blank screen contents) When a user is connected to the VNC, other remote users are not allowed to connect.

Refer to 3.8 Concurrent Connection of Network Users (page 136)



In every setup, administrator can obtain the control.

Function Details

3.3.1.4 VNC Idle Timeout

Operation control from network and local to this product is exclusive access control. Local operation is not allowed while other users are continuously operating the host server via network. (It is possible to monitor the screen.) Also, remote operation is not allowed while a local user is operating the host server.



The following three are operating data.

- Entry from the keyboard
- Mouse Cursor Movement
- Mouse Button Click

The VNC goes to neutral status if there is no operating data, and provides operating authority to the first user who enters data while the VNC is in neutral status.

If a remote user does not have control, VNC menu bar is displayed as follows.



A time-out period is set until the VNC becomes neutral here.

Enter numerical characters (by the second) in the [Timeout time] text box. Click the [Commit Change] button to apply the setting. Specify a value between 5 and 300 seconds.

VNC Idle Timeou	t	
Timeout time:	5 seconds Commit Change	×

If a value besides 5 to 300 is entered, the following error message is displayed and the setting is not changed.





The time-out period depends on the network condition. Please note that the time-out period would give or take a few seconds because of network traffic.

3.3.2 Disconnect all VNC users

Click <u>Disconnect all VNC users</u> in the menu-selecting area, the following setting page is displayed. All active VNC users can be disconnected in this page.



Click [Disconnect all VNC users] button, the following message is displayed and all active VNC users are disconnected.



After the VNC disconnection, Java VNC displays the following message. Click [Close window] button to exit. If you want to connect to the VNC again, click <u>VNC</u> <u>login (more secure)</u> or <u>VNC login (faster)</u> from the menu selecting area in the web page.

≜,noname	_ 🗆 ×
Network error: remote side closed connection	n
Java Applet Window	

3.3.3 Keyboard/Mouse/KVM Setup

Click <u>Keyboard/Mouse/KVM Setup</u> from the menu-selecting area, the following setting page is displayed.

On Screen Display (OSD) hot key setting to use this product with the KVM switch, and keyboard and mouse setting is performed in this page.

le Edit Yew Fgyorites Tools Help			
) Back + 🐑 - 💌 😰 🔥 🔎 See	nch 🧙 Favorites 🚱 🙈 🚴 🥽 🦓		
aress 🗃 https://192.168.0.100/nph-the.ogi/inde:	(e.hml	💌 🔁 Go 🛛	Links
s This	SERVIS IP-KVM (FX-7001NP Series : Versio Machine is "noname"@192.168.0.100(00:e	n V1L20ES) :0:00:ee:04:03).	
User Management Idle Session Timeout	Keyboard/Mouse/KVM Setup		
 VNC Operation Setting VNC login and 	Hot Key configuration of FCL KVM Switch	Disable	
Disconnect all VNC users	Keyboard Mapping (for localization)	Generic or US/English 💌	
 Keyboard/Mouse Setup 	Disable US8 Keyboard/Mouse Emulation	Normal (Emulation active)	
Other Setting Identification	Disable US8 Absolute Mouse Support	Disabled (Relative mouse) 💌	
Recent system log	US8 Device	Keyboard, Mouse 💌	
Set date & time		,	
Information Basic			
.ogin name:admin(192.160.0.175) Jser(s) in Web login: admin*, Jser(s) in VNC login: <u>(Update state)</u>		1	
Done		🔒 🔮 Internet	
	-	7 1	

Hot Key configuration of FCL KVM Switch	Disable
Keyboard Mapping (for localization)	Generic or US/English
Disable USB Keyboard/Mouse Emulation	Normal (Emulation active) 💌
Disable USB Absolute Mouse Support	Disabled (Relative mouse) 💌
USB Device	Keyboard, Mouse 💌

3.3.3.1 Hot Key configuration of FCL KVM Switch

To use this product with the FCL KVM switch, click [KVM] button in the VNC screen to display the server-selecting menu for the KVM switch.

There are three OSD display hot key operation for FCL KVM switch as follows.

- Ctrl + Shift + Alt key (click all at once)
- Ctrl key (click twice)
- Scroll Lock key (click twice)

Click [KVM] button in the VNC window menu bar to select hot key operation to input KVM switch from the list.

Keyboard/Mouse/KVM Setup			
Hot Key configuration of FCL KVM Switch	Ctrl+Shift+Alt 🔽 Disable		
Keyboard Mapping (for localization)	Ctrl(twice)		

The following message is displayed after selecting and the setting is reflected.



[Disable] is specified as the initial setting. [KVM] and [KVM-RST] button are not displayed in the VNC menu bar in this setting.



Connection with non-Fujitsu KVM switch is not supported.

3.3.3.2 Keyboard Mapping (for localization)

Select the keyboard type to match the connecting host servers OS language. Three keyboards are available as follows.

- Japanese (106/109 keys)
- Generic or US/English
- German (QWERTZ layout)

Select the keyboard type from the list as in the following diagram. The selected setting is reflected immediately.

eyboard/Mouse/KVM Setup	
Hot Key configuration of FCL KVM Switch	Ctrl+Shift+Alt
Keyboard Mapping (for localization)	Generic or US/English Generic or US/English
Disable USB Keyboard/Mouse Emulation	German (QWERTZ layout)

Keyboard mapping changed. VNC Connections must be reestablished.

Wait 3 seconds to continue, or click here.



If the keyboard type is different from the host server OS language, unexpected key could be entered.

3.3.3.3 Disable USB Keyboard/Mouse Emulation

USB keyboard and mouse emulation setting is performed here.

When this product and the host server is connected by both PS/2 and USB cables and "disabled" is selected in this setting, the host server recognizes the PS/2 keyboard and mouse as connected.

Select enabled/disabled the USB keyboard/mouse emulation function from the list as follows. The selected setting is reflected immediately.

Keyboard/Mouse/KVM Setup

Hot Key configuration of FCL KVM Switch	Disable
Keyboard Mapping (for localization)	Generic or US/English 💌
Disable USB Keyboard/Mouse Emulation	Normal (Emulation active)
Disable USB Absolute Mouse Support	Disabled (Relative mouse) 💌

Setting changed. VNC Connections must be re-established.

Wait 3 seconds to continue, or click here.

The virtual disk function is available even if the USB keyboard and mouse emulation is set to "disabled".

3.3.3.4 Disable USB Absolute Mouse Support

Select enabled/disabled the absolute mouse when this product and host server is connected with USB.

Absolute mouse: The mouse pointer does not move anywhere but the specified position (absolute-value).

Relative mouse: The mouse pointer will move more than the specified value. Click mouse pointer correction button in the VNC menu bar to re-synchronize the cursor.

<u>The USB absolute mouse is disabled by the default settings.</u> Select enabled/disabled from the list to change the absolute mouse setting as follows. The selected setting is reflected immediately.

Keyboard/Mouse/KVM Setup

Hot Key configuration of FCL KVM Switch	Disable
Keyboard Mapping (for localization)	Generic or US/English 💌
Disable USB Keyboard/Mouse Emulation	Normal (Emulation active) 💌
Disable USB Absolute Mouse Support	Disabled (Relative mouse) 💌 Normal (Absolute mouse)
USB Device	Keyboard, Mouse

Setting changed. VNC Connections must be re-established.

Wait 3 seconds to continue, or click here.



If the USB absolute mouse setting is enabled, mouse pointer correction button and AutoSync setting display is displayed in gray.

3.3.3.5 USB Device

Set the USB keyboard, USB mouse and virtual USB device to be enabled/disabled when this product is connected to the host server with USB. **Default setting is [Keyboard, Mouse].**

Keyboard, Mouse, Storage:

Enables to use the USB keyboard, USB mouse and USB virtual disk.

Keyboard, Mouse (default setting):

Enables to use the USB keyboard and USB mouse. USB virtual disk is disabled.

Keyboard:

Enables to use only the USB keyboard. USB virtual disk and mouse is disabled.

<u>Select [Keyboard, mouse and storage] from USB device setting list to enable the USB virtual disk function as follows.</u>

The setting is reflected immediately.

Keyboard/Mouse/KVM Setup

Hot Key configuration of FCL KVM Switch	Disable
Keyboard Mapping (for localization)	Generic or US/English 💌
Disable USB Keyboard/Mouse Emulation	Normal (Emulation active) 💌
Disable USB Absolute Mouse Support	Disabled (Relative mouse) 💌
USB Device	Keyboard, Mouse Keyboard, Mouse, Storage Keyboard, Mouse Keyboard

USB device setting is changed.

Wait 3 seconds to continue, or click here.

USB keyboard and mouse function is enabled only when the USB keyboard/mouse emulation setting is "Normal (Emulation active)". USB keyboard and mouse do not work when the USB keyboard/mouse emulation setting is "disabled".

CAUTION

If the host server is rebooted, USB virtual disk function will be "Disable" automatically. When you use USB virtual disk function again after the host server starts, please set USB Device setup as [Keyboard, Mouse, Storage].

USP Device	Keyboard, Mouse, Storage 💌
	Keyboard, Mouse, Storage
	Keyboard, Mouse
	Keyboard

3.3.4 Virtual Disk Setting

Select [Keyboard, mouse and storage] from USB device setting list in the [Keyboard, mouse and KVM setting] page to enable the virtual disk function.

3.3.4.1 Outline of Functions

By connecting via USB to the host server, this product can be emulated to the host server as any of USB floppy disk, USB RAM disk, or USB CD-ROM drive.

Virtual floppy disk and RAM disk provides memory area of this product to the host server as virtual drive. This enables file data exchange between the host server and remote terminal units and facilitates the host server deployment process.



The virtual CD-ROM drive is realized by USB interface and image file server (http) established in the same network as this product. This product converts image files (iso file) to virtual CD-ROM drive and provides them to the host server.



3.3.4.2 Virtual Disk Status

Virtual disk status must be changed [Ejected] from/to [Inserted] on the web page or VNC screen to use files in the virtual disk.

[Ejected]:

Use (reference, save, addition and delete) virtual disk files in the remote terminal.



[Inserted]:



The host server recognizes virtual disk as a USB drive. It is able to read and write the files in the virtual disk (Read only for virtual CD-ROM drive).

Switching virtual disk status in VNC screen method

1. After VNC connection, click [Disk Ctrl] in the menu window to display the disk operation window.

	x
System ID	-Server Info
Mouse Resyn	Host power:ON
PS/2 Reset	Video mode:800x600 @ 60Hz
USB Menu	KB mouse I/F: PS/2 USB
Video Reset	LED State:[Num][Caps][Scr]
Take Ctrl	Machine Info
Video Tune	Power In: 1:unpluged 2:pluged
VirtKeys	My IP:192.168.0.100
Disk Ctrl	Time: 1 May 2006 06:13:40 +0000
Menusar	- Tx Info
KVM Menu	Tx rate/delay:4 Kbps/56.4ms
	B/W:: Min Avg Fast Auto
	- Thumbnails
	Thumbnails: 1/2 1/4 1/8 1/16

2. The following message is displayed when the USB virtual disk status is [Ejected].

Click [Insert] button to switch to [Inserted] status.



3. The following message is displayed when the USB virtual disk status is [Inserted].

Click [Eject] button to switch to [Ejected] status.

x
Status:Inserted: 1.44M Floppy
Access:3/0 (r/w)
Insert Eject USB Replug

Disk operation window screen and operating method

Disk Operation Window		
Status:	Display the insert or eject status of virtual disk. Ejected: the host server does not recognize Virtual disk. Inserted: Host server recognizes the virtual disk.	
Access:	Display the USB disk type (CD-ROM, 8M RAM, Floppy).	
Insert	Insert the virtual disk. (The menu is displayed in gray while the disk is inserted.) This will enable the host server to recognize the virtual disk.	
Eject	Eject the virtual disk. (The menu is displayed in gray while the disk is not inserted.) This will enable remote user to access the virtual disk.	
USB Replug	Disconnect the USB connection and connect again.	
x	Close the [Disk operation] window.	

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Click <u>File Transfer</u> from the menu selecting area and for virtual disk setting on the web page is performed on the following page.

🚰 noname (192.168.0.100): SERVIS IP-KVM 1p	Converter - Microsoft Internet	Explorer	6	× ا
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> ools <u>H</u> elp				1
🔇 Back 🔹 💮 🖌 💌 😰 🐔 🔎 Se	arch 🤺 Favorites 🧭 🔗	- 😓 🔜 🦓		
Address 🗃 https://192.168.0.100/nph-the.cgi/inde	x_e.html		💌 🔁 Go 🛛 Link	s »
This	SERVIS IP-KVM (FX- Machine is "noname	7001NP Series : Version V1L20ES) "@192.168.0.100(00:e0:00:ee:04:03).		
User Management Idle Session Timeout VNC Operation Setting	File Transfer			
VNC login and Timer Disconnect all VNC users Keyboard/Mouse Setup File Transfer Other Setting	Current Status Access Current Change Disk T CO-ROM ISO I Access Raw File	i Vpe mage oppy/Ramdisk Images		
Identification Recent system log entries	Current Status			
<u>Set date &</u>	Virtual disk	Inserted		
time	Data	(not available, host has control)		
Information Basic	Disk type	Floppy		
Information -1	Size	1,440 KiBytes		
	Access	Read-write		-
Login name:admin(192.168.0.175) User(s) in Web login: admin*, User(s) in VNC login: <u>(Update state</u>)	1			
Completed SSI bandshake completed		A	Internet	

3

Function Details

Current Stati	IS			
Access Curre	<u>nt Disk</u>			
Change Disk	<u>Type</u> Imago			
Access Raw I	<u>Floppy/Ramo</u>	disk Images		
rrent Status				
Virtual disk	Fiected	Ejected		
Data	Available	Available		
Disk type	Generic RAM disk			
Size	8 MiBytes			
Access	Read-write			
Space used	0% full (8	,162K available of 8,162K total)		
Disk image	<u>ramDisk</u>			
		Refresh		
			<u>T</u> op of Page	
cess Current	Disk			
Browse files		Browse disk		
Browse mes		Fiest		
Eject disk		Eject		
		Incort		
Insert disk		Insert		
<u> </u>				
			<u>Top of Page</u>	
ongo Dick Ty	20			
	he	4	1	
	_	Format as floppy		
1.44M Floppy	i	Format as ramdisk		
1.44M Floppy				
1.44M Floppy Ramdisk				
1.44M Floppy Ramdisk		CD-ROM image		
1.44M Floppy Ramdisk CD-ROM		CD-ROM image		
1.44M Floppy Ramdisk CD-ROM		CD-ROM image		
1.44M Floppy Ramdisk CD-ROM		CD-ROM image	Top of Page	
1.44M Floppy Ramdisk CD-ROM	nage	CD-ROM image	Top of Page	
1.44M Floppy Ramdisk CD-ROM	nage	CD-ROM image	<u>Top of Page</u>	
1.44M Floppy Ramdisk CD-ROM D-ROM ISO In http://xxx.net,	nage /yyy.iso	CD-ROM image	<u>Top of Page</u>	
1.44M Floppy Ramdisk CD-ROM D-ROM ISO In http://xxx.net	nage /yyy.iso	CD-ROM image	Top of Page	
1.44M Floppy Ramdisk CD-ROM D-ROM ISO In http://xxx.net	nage /yyy.iso	CD-ROM image	<u>Top of Page</u>	
1.44M Floppy Ramdisk CD-ROM D-ROM ISO In http://xxx.net,	nage /yyy.iso	CD-ROM image Commit	<u>Top of Page</u> <u>Top of Page</u>	
1.44M Floppy Ramdisk CD-ROM D-ROM ISO In http://xxx.net, cess Raw Flo	nage /yyy.iso ppy/Ramdi	CD-ROM image Commit sk Images	<u>Top of Page</u> <u>Top of Page</u>	
1.44M Floppy Ramdisk CD-ROM D-ROM ISO In http://xxx.net, cess Raw Flo	nage /yyy.iso ppy/Ramdi	CD-ROM image Commit sk Images Browse Upload	<u>Top of Page</u>	
1.44M Floppy Ramdisk CD-ROM D-ROM ISO In http://xxx.net, cess Raw Flo	nage /yyy.iso ppy/Ramdi	CD-ROM image Commit sk Images Browse Upload	<u>Top of Page</u> <u>Top of Page</u>	
1.44M Floppy Ramdisk CD-ROM D-ROM ISO In http://xxx.net, cess Raw Flo	nage /yyy.iso ppy/Ramdi	CD-ROM image Commit sk Images Browse Upload mage	<u>Top of Page</u> <u>Top of Page</u>	

Refer to the following steps for detailed operation methods of three different virtual disks.

3.3.4.3 Virtual Floppy Disk

This function makes the host server recognize this product as 1.44M-floppy disk drive and enable file transfer between remote terminal and the host server. Virtual floppy disk drive setting method is described below. (The following method is for the Windows OS host server.)

Setting Procedure

 <u>Select [Keyboard, Mouse, Storage] from the [Keyboard/Mouse/KBM Setup]</u> page for USB device setting.
 Refer to 3.3.3.5 USB Device (page 89)

Keyboard/Mouse/KVM Setup

Hot Key configuration of FCL KVM Switch	Disable
Keyboard Mapping (for localization)	Generic or US/English
Disable USB Keyboard/Mouse Emulation	Normal (Emulation active) 💌
Disable USB Absolute Mouse Support	Disabled (Relative mouse) 💌
USB Device	Keyboard, Mouse Keyboard, Mouse, Storage Keyboard, Mouse Keyboard



If the host server is rebooted, USB virtual disk function will be "Disable" automatically.

When you use USB virtual disk function again after the host server starts, please set USB Device setup as [Keyboard, Mouse, Storage].

In the case where it sets up on the Web page:

In the case where it sets up on the VNC window: Refer to 2.5.9 USB Setting Window (page 47)
2. Click [Format as floppy] in the File Transfer page.

1.44M Floppy	Format as floppy	
Ramdisk	Format as ramdisk	
CD-ROM	CD-ROM image	

3. The following message is displayed. The setting is reflected after 3 seconds and return to the File Transfer page.



The disk is formatted as 1.44M floppy disks for MS-DOS (for Windows).

4. Click [Insert] button.

Browse files	Browse disk	
Eject disk	Eject	
Insert disk	Insert	

5. The following message is displayed and the virtual disk is inserted in the host server. Returns to the <u>File Transfer</u> page after 3 seconds.



6. Execute VNC login and check [My computer] in the host server. The new disk is recognized as [3.5 inch floppy disk].

🐇 noname							
[Num] [Caps] [So	r] 45 Kbps/57.1ms Men	nu M-Resyn Ctl-Al	lt-Del VirtKeys	PS/2 USB KVM KVM-RST	Video-RST Auto	Sync	
My Documents							
	My Computer						
	File Edit View Favorites	s <u>T</u> ools <u>H</u> elp					
My Computer	🔾 Back 🔹 🍙 🗸 🎓	Search 🕅 Fol	ders 🔯 🎲 🕽	K 🖌 📖 -			
	Address Ny Computer		truck Party			▼ 🛃 Go Links »	
§	Name Type		Total Size	Free Space Comments			
My Network	Files Stored on This Comp	puter					
Places	Shared Documents File Fo	older					
1	Administrator's D File Fo	older					
Pecycle Bin	Hard Disk Drives						
	Second Disk (C:) Local D	Disk	20.0 GB	15.4 GB			
	Cocal Disk (D:) Local L	DISK					
Internet	Devices with Removable	Storage					
Explorer	31/2 Floppy (A:) 31/2-In	nch Floppy Disk					
	Solojeo-kiironv Coon	we					
pattern ong							
paccomping							
	k −						
	6 objects					My Computer	
	jo objects				1 10	g My Compater //.	
🍠 Start	My Computer						« 🗞 🍢 🛄 2:42 PM
Java Applet Wind	low						

Toname						
[Num][Caps][So	m] 30 Kbps/57.1ms Me	nu M-Resyn Ctl-Alt-Del VirtKey:	S PS/2 USB KVM KVM-R	ST Video-RST Aut	oSync	
My Documents						
			(F)			1
	A:\	· 1 · · · 1				
	Elle Edit View Favorite					
My Computer	😋 Back 🔹 🕑 👻 💋	Search 🤌 Folders 🔛 🎲	X 9 💷 ·			
	Address 🐰 A:\				💌 🛃 Go 🛛 Links 🎇	
N 199	Name A	Size Type	Date Modified			
My Network	Put files hereTXT	0 KB Text Document 1 KB Text Document	8/12/2003 9:29 AM 3/28/2006 5:07 PM			
Places			0/20/2000 010/ 11/			
-						
2						
Recycle Bin						
-						
\geq		Ν				
Internet		42				
Explorer						
	i.					
pattern.png						
	2 objects			4 bytes	S My Computer	
🏄 Start 🛛 💐	A:\1					« 🇞 🌉 🛄 2:41 PM
Java Applet Wind	dow					

7. You can save the files in the host server as follows.

8. The following provides the method to refer to the files in the host server from the remote terminal. Return to <u>File Transfer</u> page and click [Eject] button.

Browse files	Browse disk	
Eject disk	Eject	
Insert disk	Insert	

The following dialogue box is displayed. Click [OK] button.



The following message is displayed and the virtual floppy disk is ejected from the host server.

Disk ejected; it may now be changed/viewed.

Wait 3 seconds to continue, or click here.

9. Click <u>Browse disk</u> after ejecting the virtual disk.

Browse files	Browse disk
Eject disk	Eject
Insert disk	Insert

10. The directories and file contents in the virtual disk are displayed as follows. The files saved in the host server can be confirmed.

Size	Date	Туре	Name	Delete
7,168	Thu Jan 1 00:00:00 1970	Directory		
296	Thu Jan 1 00:00:00 1970	Directory	(parent directory)	
0	Tue Aug 12 09:29:52 2003	File	Put files hereTXT	Delete
4	Thu Mar 23 21:09:00 2006	File	test.txt	Delete
oad f <e a="" i<="" th=""><th>0% full (1,4) ile into this directory. Browse</th><th>] 23K availa Ipload file</th><th>able of 1,423K total)</th><th></th></e>	0% full (1,4) ile into this directory. Browse] 23K availa Ipload file	able of 1,423K total)	
oad f <e a="" r<="" th=""><th>0% full (1,4: ile into this directory. Browse L new subdirectory. Make director</th><th>) 23K availa Upload file Y</th><th>able of 1,423K total)</th><th></th></e>	0% full (1,4: ile into this directory. Browse L new subdirectory. Make director) 23K availa Upload file Y	able of 1,423K total)	
oad f ke a i ert di	0% full (1,4 ile into this directory. Browse u new subdirectory. Make director isk so host can use it.	23K availa Ipload file Yy	able of 1,423K total)	
oad f <e a="" r<br="">ert di Ins</e>	0% full (1,4) ile into this directory. Browse]] 23K availa Ipload file Y	able of 1,423K total)	
oad f ke a r ert di Ins	0% full (1,4: ile into this directory. Browse] 23K availa Ipload file Y	able of 1,423K total)	
oad f ke a r ert di Ins	0% full (1,4: ile into this directory. Browse L new subdirectory. Make director isk so host can use it. iert disk] 23K availa Ipload file	able of 1,423K total)	

Click the file name to display that file in the html form.



Virtual disk status must be [Ejected] to confirm its contents. The file larger than 1.4M-byte cannot be saved.

Click [Delete] button to delete the file.

Size	Date	Туре	Name	Delete
7,168	Thu Jan 1 00:00:00 1970	Directory]	
296	Thu Jan 1 00:00:00 1970	Directory	(parent directory)	
0	Tue Aug 12 09:29:52 2003	File	Put files hereTXT	Delete
4	Thu Mar 23 21:09:00 2006	File	test.txt	Delete

The following confirmation dialogue box is displayed. Click [OK] to delete the file.

Microsof	t Internet Expl	orer	×
?	Are you sure y /test.txt	ou want to delete t	he file:
	OK	Cancel	
	· 🗸		

11. To upload the files to the virtual disk, specify the path of the files in the remote terminal and click [Upload file] button.

Size	Date	Туре	Name	Delete
7,168	Thu Jan 1 00:00:00 1970	Directory]	
296	Thu Jan 1 00:00:00 1970	Directory	(parent directory)	
D	Tue Aug 12 09:29:52 2003	File	Put files hereTXT	Delete
oad f	0% full (1,4 i le into this directory.	23K availa	able of 1,423K total)	

The file uploaded from the remote terminal can be handled at the host server.

3.3.4.4 Virtual RAM Disk

This function makes the host server recognize this product as 8M-RAM disk drive and enable to file transfer between remote terminal and the host server. Virtual RAM disk drive setting method is described below. (The following method is for when the host server is Windows OS).

Setting Procedure

 Select [Keyboard, Mouse, Storage] from the [Keyboard/Mouse/KVM Setup] page for USB device setting.
 Refer to 3.3.3.5 USB Device (page 89)

Keyboard/Mouse/KVM Setup

Hot Key configuration of FCL KVM Switch	Disable
Keyboard Mapping (for localization)	Generic or US/English 💌
Disable USB Keyboard/Mouse Emulation	Normal (Emulation active) 💌
Disable USB Absolute Mouse Support	Disabled (Relative mouse) 💌
USB Device	Keyboard, Mouse Keyboard, Mouse Keyboard, Mouse Keyboard



If the host server is rebooted, USB virtual disk function will be "Disable" automatically.

When you use USB virtual disk function again after the host server starts, please set USB Device setup as [Keyboard, Mouse, Storage].

In the case where it sets up on the Web page:

In the case where it sets up on the VNC window: Refer to 2.5.9 USB Setting Window (page 47) 2. Click [Format as ramdisk] in the File Transfer page.

Change Disk Type	2
1.44M Floppy	Format as floppy
Ramdisk	Format as ramdisk
CD-ROM	CD-ROM image
	Top of Page

3. The following message is displayed. The setting is reflected after 3 seconds and the screen returns to File Transfer page.



The disk is formatted as 8M-RAM disk for MS-DOS (for Windows).

4. Click [Insert] button.

Access Current Disk		
Browse files	Browse disk	
Eject disk	Eject	
Insert disk	Insert	
		Top of Page

5. The following message is displayed and the virtual disk is inserted in the host server. Return to the <u>File Transfer</u> page after 3 seconds.



6. Execute VNC log on and check [My computer] in the host server. The new disk is recognized as [Removable disk].

📩 noname		
[Num][Caps][Sc	m] 27 Kbps/356ms Menu M-Resyn Ctl-Alt-Del VirtKeys PS/2 USB KVM KVM-RST Video-RST AutoSync	
My Documents		
	My Computer	<u> </u>
	Elle Edit View Favorites Iools Help	_
My Computer	🕒 Back + 🕤 + 🏂 🔎 Search 😥 Folders 🔝 🔅 🎲 🗙 崎 🛄 +	
	Address 😼 My Computer 💽 Go 🛛 Links 3	>
	Name Type Total Size Free Space Comments	
Mu Natwork	Files Stored on This Computer	
Places	Shared Documents File Folder	
	Administrator's D File Folder	
2	Hard Disk Drives	
Recycle Bin		
	Colocal Disk (C:) Local Disk 220.0 GB 15.4 GB	
	CUCIIDISK (U;) LUCIIDISK	
\sim	Devices with Removable Storage	
Internet Explorer	BDVD/CD-RW Driv CD Drive	
	REMOTE-DISK (F:) Removable Disk	
	N	
pattern.png	45	
		_
	6 objects J 3 My Computer	
🛃 Start 🛛 🧕	My Computer	« 🗞 🌉 🛄 2:47 PM
Java Applet Wind	low	

SERVIS IP-KVM

1p Converter User's Guide

攁 noname							<u>_ ×</u>
[Num][Caps][S	m] 26 Kbps/356ms Menu	M-Resyn Ctl-Alt-Del VirtKeys	PS/2 USB KVM KVM-R	ST Video-RST Aut	toSync		
My Documents							
	≂F:\				_		
	<u>File Edit View Favorites</u>	Tools Help				27	
My Computer	😋 Back 🝷 💮 🖌 🏂 🎾	Search 😥 Folders 🎼 🎲	X 🍤 💷 ·				
	Address 🖙 F:\				🗾 🔁 G0 🛛 L	inks »	
	Name A	Size Type	Date Modified				
My Network	test.txt	1 KB Text Document	3/28/2006 5:07 PM				
rideos							
2							
Recycle Bin							
Internet Explorer		Ν					
		43					
2							
pattern.png							
	2 objects			4 bytes	😼 My Computer	11.	
Start Start	(F:)					«	🌫 🕵 🛄 2:48 PM

7. You can save files on the host server as follows.

8. Transmit the files saved in the host server to the remote terminal unit. Back to <u>File Transfer</u> page and click [Eject] button.

Browse files	Browse disk	
Eject disk	Eject	
Insert disk	Insert	

The following dialogue box is displayed. Click [OK] button.



3

Function Details

The following message is displayed and the virtual RAM disk is ejected from the host server.



9. Click <u>Browse disk</u> after ejecting the virtual disk.

Browse files	Browse disk	
Eject disk	Ejec	
Insert disk	Insert	

Size	Date	Туре	Name	Delete
16,384	Thu Jan 1 00:00:00 1970	Directory		
296	Thu Jan 1 00:00:00 1970	Directory	(parent directory)	
0	Thu Aug 14 11:54:08 2003	File	Put files hereTXT	Delete
4	Thu Mar 23 21:09:00 2006	File	test.txt	Delete
oad fil	0% full (8,16 le into this directory. Browse U ew subdirectory.	OK availa pload file	ble of 8,162K total)	
oad fil ke a n	0% full (8,16 le into this directory. Browse U ew subdirectory. Make directory	OK availa pload file	ble of 8,162K total)	
oad fil ke a n ert dis	0% full (8,16 le into this directory. Browse U ew subdirectory. Make directory sk so host can use it.	OK availa pload file	ble of 8,162K total)	
oad fil ke a n ert dis	0% full (8,16 le into this directory. Browse U ew subdirectory. Make directory sk so host can use it.	OK availa pload file y	ble of 8,162K total)	
oad fil ke a n ert dis Inse	0% full (8,16 le into this directory. Browse U ew subdirectory. Make directory sk so host can use it.	OK availa pload file	ble of 8,162K total)	
ert dis	0% full (8,16 le into this directory. Browse U ew subdirectory. Make directory sk so host can use it.	OK availa pload file y	ble of 8,162K total)	

10. The directories and file contents in the virtual disk are displayed as follows. The files saved in the host server can be confirmed.

Click the file name to display that file in the html form.

Virtual disk status must be [Ejected] to confirm its contents. The file larger than 8M-byte cannot be saved.

Click [Delete] button to delete the file.

Size	Date	Туре	Name	Delete
16,384	Thu Jan 1 00:00:00 1970	Directory]	
296	Thu Jan 1 00:00:00 1970	Directory	(parent directory)	
0	Thu Aug 14 11:54:08 2003	File	Put files hereTXT	Delete
4	Thu Mar 23 21:09:00 2006	File	test.txt	Delete

The following confirmation dialogue is displayed. Click [OK] to delete the file.

Microsof	t Internet Explo	orer	×
2	Are you sure yo	ou want to delete t	he file:
~	/test.txt		
	OK	Cancel	

11. To upload the file to the virtual disk, specify the path of the file in the remote terminal and click [Upload file] button.

Size	Date	Туре	Name	Delete			
16,384	Mon Mar 27 21:09:41 2006	Directory]				
296	Thu Jan 1 00:00:00 1970	Directory	(parent directory)				
)	Thu Aug 14 11:54:08 2003	File	Put files hereTXT	Delete			
0% full (8,162K available of 8,162K total)							

The uploaded file from the remote terminal can be handled at the host server.

3.3.4.5 Virtual CD-ROM Drive

By specifying the URL for the ISO files in the file server, the product can be emulated to the host server as a virtual CD-ROM drive. ISO files are emulated in the accessible file server of this product. Store the ISO files in the online file server. The virtual CD-ROM drive setting method is described below. (The following method is for the Windows OS host server.)

Setting Procedure

1. Select [Keyboard, Mouse, Storage] on the [Keyboard/Mouse/KVM Setup] page for USB device setting.

Refer to 3.3.3.5 USB Device (page 89)

Keyboard/Mouse/KVM Setup

Hot Key configuration of FCL KVM Switch	Disable
Keyboard Mapping (for localization)	Generic or US/English 🔽
Disable USB Keyboard/Mouse Emulation	Normal (Emulation active) 💌
Disable USB Absolute Mouse Support	Disabled (Relative mouse) 💌
USB Device	Keyboard, Mouse



If the host server is rebooted, USB virtual disk function will be "Disable" automatically.

When you use USB virtual disk function again after the host server starts, please set USB Device setup as [Keyboard, Mouse, Storage].

In the case where it sets up on the Web page: Refer to 3.3.3.5 USB Device (page 89)

In the case where it sets up on the VNC window: Refer to 2.5.9 USB Setting Window (page 47)

2. Specify URL for ISO files to the [CD-ROM ISO image] in the [File Transfer] page and click [Commit] button.

CD-ROM ISO Image		
http://192.168.0.175/test.iso	Commit	
	\sim	<u>Top of Page</u>

(It is also specified by entering the URL and clicking [CD-ROM image] button.)

3. When iso files exist in the online file server, it is displayed as follows. Click <u>Return to File Transfer page</u>.



If the link failed or the ISO files are disabled, the following message is displayed and the virtual CD-ROM function could not execute.



 Check [Current Status] in File Transfer page. If [Virtual disk] is "Inserted", the host server recognizes the virtual CD-ROM.
 By clicking [Disk Image] URL, it is also able to download ISO files from the file server to the operating terminal.

Current Status Virtual disk Inserted Data (not available, host has control) Disk type CD-ROM ISO-image Size 4 MiBytes Access Read-only N/A (ISO image) Space used http://192.168.0.175/test.iso Disk image Refresh Top of Page

5. Execute VNC log on and check [My computer] in the host server. It is confirmed that the CD-ROM drive is recognized.

攁 noname							<u>- </u>
[Num][Caps][So	24 Kbps/55.7ms	Menu M-Resyn Ct	I-Alt-Del VirtKeys	PS/2 USB KVM KVM-RST	Video-RST AutoS	ync	
My Documents							
	💈 My Computer						1
	<u>File E</u> dit <u>V</u> iew F	avorites <u>T</u> ools <u>H</u> elp					
My Computer	🕞 Back 🝷 🕥 🛃	🏂 🔎 Search 🜔	Folders 🔛 🎲 🕻	× 🍤 💷 ·			
	Address 😼 My Compu	uter				💌 🛃 Go 🛛 Links 🌺	
	Name	Туре	Total Size	Free Space Comments			
My Network	Files Stored on Thi	s Computer					
Places	Shared Documents	File Folder					
1	Auministrators D	File Folder					
Recycle Bin	Hard Disk Drives						
	Signature Section Sec	Local Disk	20.0 GB	15.4 GB			
	Local Disk (D:)	Local Disk					
	Devices with Remo	ovable Storage					
Internet Explorer	BVD/CD-RW Driv	CD Drive					
	3VOL_200411091	CD Drive	4.13 MB	0 bytes			
pattern.png							
		2					
	6 objects					My Computer	
	1				, ,		1
👌 Start	My Computer						« 🗞 📲 🔽 2:52 PM
Jaura Analat Wine							

The CD-ROM drive is accessible in this status (Read only).

3.4. Other Setting

This section provides explanations for other setting items.



3.4.1 Identification

Click <u>Identification</u> from the menu-selecting area, the following setting page is displayed.

Set the identification name and identifier settings for this product.

The setting value is displayed as device information in the System ID Window of the VNC connection.

Refer to 2.5.4 System ID Window (page 37)

It has no effect on the operation, even if it is not set.

noname (192.160.0.100): SERVES IP-KVM 1p Co	nverter - Microsoft Internet	Daplorer	_ @ ×			
Ble Edit View Figurates Isols Help						
😋 Back + 🕞 - 💌 😰 🏠 🔎 Seard	h 🧙 Favorites 🕢 🔗	- 😓 🖂 🚳				
Address a https://192.168.0.100/nph-the.ogi/ndex_e	.html		💌 🛃 Go 🛛 Links 🏁			
SE This M	RVIS IP-KVM (FX- lachine is "noname	7001NP Series : Version V1L20ES) "@192.168.0.100(00:e0:00:ee:04:03),				
Disconnect all VNC users Keyboard/Mouse Setup Elle Transfer Other Settling	Identification					
Identification	Machine Name	noname				
system log	Location	Unknown location?				
Set date &	Contact Name	No contact?				
time	Network Address	No net address?				
Basic	Description	No description?				
Information Identification Pate & Time Keybard/Mouse Firmware Information Copyright Notices • Flosh/Firmware	You must click he	re to save your changes: Commit Changes				
		-				
Login name:admin(192.160.0.175) User(s) in Web login: admin ⁺ , User(s) in VNC login: <u>(Update state)</u>						
Progress: 59. handshake completed.			Internet			
		77				

Unknown location?
No contact?
No net address?
No description?

Machine Name

Name to identify this product. The Machine Name is enabled to provide HCP server as the "client name" when you create DNS entry conform to this name. It is also to be displayed in the each top of web browser interface pages and used as "desktop name" for the VNC client.

Location

Enter the information where the system is located. This value transmitted as system.sysLocation value via SNMP.

Contact Name

Enter the contact information relating to this product. (Usually enter e-mail address etc.)

This value is transmitted as the system.sysContact via SNMP.

Network Address

This value is not used for system configuration, but it stores user-defined value to identify the operated device in the network. Enter the DNS name for the operating device. This item is not required and can be used at your discretion.

Description

Enter the user-defined descriptions for controlled devices.

After entering the setting, click the [Commit Changes] button. The following message is displayed and the setting is reflected.



Wait 3 seconds to continue, or click here.

No Japanese font is acceptable for system ID setting. Use English one-byte characters for this item.

3.4.2 Recent system log entries

Click <u>Recent system log entries</u> from the menu-selecting area, the following setting page is displayed.

Specify system log items in this page.



Recent system log entries (syslog)

System log

Ja	n 1	00:00:00	(none) :	syslog.info syslogd started: BusyBox v0.60.4 (2003.	
Ja	n 1	00:00:02	(none)	user.notice root: Network servers (re)starting.	
Ja	n 1	00:00:03	(none)	user.info_syslog: insmod -s -k br0	
Ja	n 1	00:00:03	(none) :	syslog.info System log daemon exiting.	
Ja	n 1	00:00:03	noname :	syslog.info syslogd started: BusyBox vU.60.4 (2003.	
Ja	n 1	00:00:04	noname a	auth.info sshd[93]: Server listening on 192.168.1.1	
Ja	n 1	00:00:04	noname a	auth.info sshd[93]: Server listening on 192.168.0.1	
Ja	n 1	00:00:04	noname a	auth.info_sshd[93]: Server_listening_on_99.99.99.99	
Ja	n 1	00:00:08	noname	user info init: Starting pid 127, console /dev/tts/	
Ja	n 1	10:00:08	noname	user info init: Starting pid 128, console /dev/tts/	
Ma	y 22	19:57:38	noname a	auth notice syslog: Successful login (user admin) v	
na	y 22	19:58:25	noname a	auth.notice syslog: Session logout (user admin from	
na	9 22	19:58:37	noname «	auth.notice sysiog: Successful login (user admin) v	
Ma M-	9 22	19:59:25	noname a	auth.notice sysiog: Session logout (user admin from	
Ma.	y 22	20.01.24	noname	auth.notice systeg. Successful login (user aumin) v	
Ma Ma	y 22	20.04.34	noname (authinotice system: Successful login (user admin from	
Ma Ma	y 22	20.04.43	noname (authinotice system: Secsion legent (user user) v	
Ma	y 22	20:00:34	noname (auth notice syslog: Successful login (user admin) v	
Ma	y 22	20:13:27	noname	local0 notice suslog: VNC: New connection from 192	
Ma	g 22	20.13.27	noname /	auth notice system: Successful login (user admin) f	
- M-	÷ 55	20.12.54	nonomo	with notice evelog: WWC: Client discomposted (from	
•				• • • • • • • • • • • • • • • • • • •	
Derive Le					
Downio	ad s	<u>ysiog ne</u>	<u>re.</u>		
01		0.0			
	earc	.og			

٠

Click [Download syslog here.] to display system logs in another window.

Nicrosoft Internet Explorer 🖉 https://192.168.0.100/nph-the.cgi/dump-log.sh - Microsoft Internet Explorer	
Elle Edit View Favorites Icols Help	
🕞 Back + 🕤 + 🗷 🛃 🏠 🔎 Search 🤺 Favorites 🤣 🔗 + 😓 🔂	
Agdress 🗃 https://192.168.0.100/nph-the.cg/dump-log.sh 🗾 🍃 Go	Links »
<pre>Jac 1.1. Joint J. Joint J</pre>	A A
) 🚔 Done	

Click the [Clear Log] button. The following message is displayed and the system log is cleared.



3.4.3 Set date & time

Click <u>Set date & time</u> from the menu-selecting area and the following setting page is displayed. Specify date and time settings in this page.

name (192.160.0.100): SERVIS IP-KVM Ip Edit View Exceptor Tools Help	Converter - Microsoft Internet Diplarer	
Kank • 🗇 · 🖹 🖹 🏠 🔎 Se	rch 👷 Favorites 🐵 😥 🗔 🖏	
ss 📓 https://192.168.0.100/nph-the.ogi/nde	(e.tm) 💌 🛐 Go Unio 34	
This	ERVIS IP-KVM (FX-7001NP Series : Version V1L20ES) Machine is "noname"@192.168.0.100(00:e0:00:ee:04:03).	
- Disconnect all		
Disconnect all a WicLears Keyboard/Mouse Satup Ele Ironsfer Other Settinication Beschild Beschild Set date 8 time Information Identification Date: 1 Information Identification Date: 1 Information Identification Date: 1 Information Copyright Notices Files/VFinnware 1	Set Date and Time Current time When this page was sent: Mos May 22 20:36:09 2006 Change time/date If the computer you are using to view this page knows the correct time, just press the button below to set the time and date to the same time as your browser. Set to LOCAL time Set to LOCAL time	
rer (s) in Web login: admin", er(s) in VNC login: <u>(Update state</u> gress: \$3, handshake completed.	🔰 👔 🖓 🕞 Internet	
Set Dete		
Set Date	and Time	
Set Date Current tim When this p	and Time e page was sent:	
Set Date Current tim When this p Mon May 22	and Time e page was sent: 20:36:09 2006	
Set Date Current tim When this p Mon May 22 Change tim	and Time e bage was sent: 20:36:09 2006 e/date	
Set Date Current tim When this p Mon May 22 Change tim If the comp the button	and Time e bage was sent: 20:36:09 2006 e/date uter you are using to view this page knows the correct time, just p below to set the time and date to the same time as your browser.	press
Set Date Current tim When this p Mon May 22 Change tim If the comp the button	and Time e bage was sent: 20:36:09 2006 e/date uter you are using to view this page knows the correct time, just p below to set the time and date to the same time as your browser.	press
Set Date Current tim When this p Mon May 22 Change tim If the comp the button Set to Set to	and Time e bage was sent: 20:36:09 2006 e/date uter you are using to view this page knows the correct time, just p below to set the time and date to the same time as your browser. LOCAL time	press
Set Date Current tim When this p Mon May 22 Change tim If the comp the button	and Time e bage was sent: 20:36:09 2006 e/date uter you are using to view this page knows the correct time, just p below to set the time and date to the same time as your browser. LOCAL time	press

The following two kinds of date and time settings are available.

- Date and time specified in the local terminal PC (Local) that displays the web pages.
- > UTC (Coordinated Universal Time, GMT or Zulu).

Click [Set to LOCAL time] or [Set to UTC time] button, the following message is displayed and the time is set.



3.5. Information

Displays the setting status of this product. General users can check this item.

Click setting items from the menu-selecting area of the web page, the setting value is displayed in the right screen.



Refer to the following section for information.

3.5.1 Basic Information

Click <u>Basic Information</u> from the menu-selecting area, and the following contents are displayed.

You can check basic information here.



Items in "Basic information" are explained in the following section.

3.5.1.1 Hardware Information

The power on/off status and video mode of the host server is displayed.

Host power	ON	
Video mode	800x600 @ 75Hz	

3.5.1.2 Network Information

The specified network information of this product is displayed.

Port	LAN	
IP Address	192.168.0.100	
Subnet mask	255.255.255.0	
Gateway (or 0.0.0.0 for none)	192.168.0.1	
Broadcast	192.168.0.255	
DNS Servers		
Default DNS domain suffix		
MAC Address	00:e0:00:ee:04:03	

3.5.1.3 Port Numbers

The specified network port numbers of this product is displayed.

N		
Soruico	Cu	rront Dort
cch	22	
http	80	
snmp	161	
https	443	
vnc	5900	
vncs	15900	

3.5.1.4 Connection Information

The user information currently connecting to this product is displayed.

Connect from	192.168.0.175:1152	
Login user	admin	
Encryption	RC4-MD5 (128 bit key)	

3.5.1.5 Current Users

The user account information currently logged on to this product is displayed.

ŧ	Username	From	Service	Login Method	Login Time	Last Active
1	admin *	192.168.0.175:1152	Web	Web password	24 minutes ago	O seconds ago

3.5.1.6 System log entries

System logs of this product are displayed.

Jan Jan Jan Jan Jan Jan Jan Jan	<pre>1 00:00:00 (none) syslog.info syslogd started: BusyBox v0.60.4 (2003. 1 00:00:02 (none) user.notice root: Network servers (re)starting. 1 00:00:03 (none) user.info syslog: insod -s -k br0 1 00:00:03 (none) syslog.info System log daemon exiting. 1 00:00:03 noname syslog.info syslogd started: BusyBox v0.60.4 (2003. 1 00:00:03 noname user.notice root: Network interface (re)config comp 1 00:00:04 noname auth.info sshd[93]: Server listening on 192.168.1.1 1 00:00:04 noname auth.info sshd[93]: Server listening on 192.168.0.1 1 00:00:04 noname auth.info sidl[93]: Server listening on 99.99.99.1 00:00:07 noname user.info init: Starting pid 121, console /dev/tts/*</pre>	
--	---	--

3.5.1.7 Network Config

You can check the current device setting with the following items. It is possible to debug trouble spots in the network configuration with these settings. (Cannot edit the following logs directly.)

Network Config		
WARNING: It is not possible to directly edit these files.		
<u>Current ifconfig -a output</u>		
Current route output		
Current iptables setup		
	<u>Top of Page</u>	
		_

Click [Current ifconfig -a output], and the following screen is displayed.

🚰 https://192.168.0.100/nph-the.cgi/ifconfig.sh - Microsoft Internet Explorer	
<u>File Edit View Favorites Iools H</u> elp	1
🚫 Back 🔻 🕥 🖌 😰 🏠 🔎 Search 🤺 Favorites 🚱 😒 - 🌺 🔜 🖄	
Address 🙆 https://192.168.0.100/nph-the.cgi/ifconfig.sh	Links »
eth0 Link encap:Ethernet HWaddr 00:E0:00:EE:04:0D inet addr:192.188.0.100 Bcast:192.188.0.255 Mask:255.255.255.0 UP BRDADCAST RUNNING MULTICAST MTU:1500 Metric:1 RX packets:1135 errors:0 dropped:0 overruns:0 frame:0 TX packets:1336 errors:0 dropped:0 overruns:0 carrier:0 collisions:0 txueuelen:100 RX bytes:128721 (125.7 kiB) TX bytes:346240 (338.1 kiB) Interrupt:15	4
lo Link encap:Local Loopback inet addr:127.0.0.1 Mask:255.0.0.0 UP LODFBACK RUNNING MTU:16438 Metric:1 RX packets:2124 errors:0 dropped:0 overruns:0 frame:0 TX packets:2124 errors:0 dropped:0 overruns:0 carrier:0 collisions:0 txqueuelen:0 RX bytes:400138 (330.8 kiB) TX bytes:400198 (390.8 kiB)	T
) 🕒 Done	

Click [Current route output], and the following screen is displayed.

🖉 https://192.16	8.0.100/nph-the	e.cgi/route.sh - Mi	rosoft	Intern	et Expl	orer					- D ×
<u>Eile E</u> dit <u>V</u> iew	F <u>a</u> vorites <u>T</u> oo	ls <u>H</u> elp									1
🕞 Back 👻 📀	- \star 💈 🤇	🏠 🔎 Search	쑷 Fa	vorites	6		• 🎍	🔜 🖓			
Address 🙆 https:	//192.168.0.100/n	ph-the.cgi/route.sh							-	- 🔁 Go	Links »
Kernel IP routi Destination 192.168.0.0 192.168.0.0 192.168.0.0 127.0.0.0 default	ng table Gateway * 192.168.0.1 * * 192.168.0.1	Germask 255.255.255.0 255.255.255.0 255.255.255.0 255.255.0.0.0 0.0.0.0	Flags U UG U U UG	Metric O O O O	Ref 0 0 0 0	Use 0 0 0 0	Iface eth0 eth0 eth0 lo eth0				X
🙋 Done									🔒 🎯 Int	ernet	

Click [Current iptables setup], and the following screen is displayed.

🚰 https://192.168.0.100/nph-the.cgi/iptables.sh - Microsoft Internet Explorer	
Eile Edit View Favorites Tools Help	
🕞 Back 🔻 🕑 👻 🛃 🏠 🔎 Search 🤺 Favorites 🤣 🔗 - 😓 📂 🔉	
Address 🙆 https://192.168.0.100/nph-the.cgi/iptables.sh	Links »
Chain INPUT (policy ACCEPT) target protopt source destination	X
🕘 Done	11.

3.5.2 Identification (Information)

Click <u>Identification</u> from the menu-selecting area, and the following setting page is displayed.

Check the system ID of this product here.

Inoname (192.160.0.100): STRVIS IP-KVM Ip	Converter - Microsoft Internet Explorer		X
Elle Edit Yew Fgvorites Iools Help			
😋 Back + 🕘 - 💌 📓 🐔 🔎 See	arch 🐈 Favoritas 🚱 🔗 😓 🤜	3	
Address https://192.160.0.100/nph-the-collinder	x_e.html		💌 📑 Go Links 🏁
	-		
This	SERVIS IP-KVM (FX-7001NP S	Series : Version V1L20ES)	
This	Machine is "noname"@192.10	ss.u.100(00:e0:00:ee:04:03).	
Identification			
 Recent 			
entries	Identification		
Set date 8			
time	Machine Name	noname	
 Information 	Network Address	No net address?	
Information	Description	No description?	
 Identification 	Location	Unknown location?	
 Date & Time 	Contact Name	No contact?	
 Keyboard/Mouse 			
 Entrowate Information 			
 Copyright 			
Notices			
 Flash/Firmware 			
Management			
Management			
 Logout 			
1			
		4	
Login name:admin(192.168.0.175)			
User(s) in Web login: admin*, User(s) in VNC login: (Update state)			
Progress: 59, handshake completed.			Internet
			-
		<7	

Identification

Machine Name	noname
Network Address	No net address?
Description	No description?
Location	Unknown location?
Contact Name	No contact?

3.5.3 Date & Time

Click <u>Date & Time</u> from the menu-selecting area, and the following setting page is displayed.

Check date and time specified in this product here.

Current time	Inoname (192,160,0,100): SCRVIS IP-KVM Ip (ionverter - Microsoft Internet Daplorer	<u>-</u>	. # ×
SERVIS IP-KVM (FX-7001NP Series : Version V1L20ES) This Machine is "noname"@192.168.0.100(00:e0:04:03).	Address Address Address Address	e.how	▼ → Go L	Links ³⁴
Identification sustain log enderson sustain log enderson being internation	S This I	- ERVIS IP-KVM (FX-7001NP Series : Versi Machine is "noname"@192.168.0.100(00:	on V1L20ES) e0:00:ee:04:03).	
Loging an state addition 2002.75 User(s) in VIC login: "Division addition (Unified addition coupled) Proprese: 28 houddate coupled When this page was sent: Mon May 22 20:40:10 2006	Identification Seat Sect date & Information Information Information Identification Identification Identification Copyright Notices Flash/Firmware Management Elash/Firmware Management Logout	Current time When this page was sent: Mon May 22 20:40:10 2006		
Current time When this page was sent: Mon May 22 20:40:10 2006	Login name:admin(192.160.0.175) User(5) in Web login: admin*, User(5) in VNC login: <u>(Update state)</u> Progress: 53. bandshale completed.		Internet	
When this page was sent: Mon May 22 20:40:10 2006	Current t	ime	~	
Mon May 22 20:40:10 2006	When this p	age was sent:		
	Mon May 22	20:40:10 2006		

Function Details

3.5.4 Keyboard/Mouse/KVM

Click <u>Keyboard/Mouse/KVM</u> from the menu-selecting area, and the following setting page is displayed.

Check the input interface information of this product here.



Keyboard/Mouse/KVM

Hot Key configuration of FCL KVM Switch	Disable
Keyboard Mapping (for localization)	Generic or US/English
Disable USB Keyboard/Mouse Emulation	Normal (Emulation active)
Disable USB Absolute Mouse Support	Disabled (Relative mouse)
USB Device	Keyboard, Mouse

3.5.5 Firmware Information

Click <u>Firmware Information</u> from the menu-selecting area, and the following page is displayed.

Check the firmware information of this product here.

noname (192.160.0.100): SERVIS IP-KVM Lp Con	verter - Microsoft Internet Explorer		X
Edit Year Favorites Tools Help			
Back = 💿 - 💌 😰 🟠 🔎 Search	🧙 Favorites 😸 🚘 - 😓 🗔 -	3	
ress 😸 https://192.168.0.100/nph-the.ogi/ndex_e.l	html		💌 🛃 Go Links 🏁
SEI	VIS IP-KVM (FX-7001NP S	Series : Version V1L20ES)	
This Ma	achine is "noname"@192.10	58.0.100(00:e0:00:ee:04:03).	
- Identification			
Recent			
system log	Eirmurara Informati		
entries	Finnware Informatio		
 Set date & 	Component	Version / Release	
Information	System firmware	V1L20E5	
 Basic 	CGI Component	V1L20E5	
Information	Linux Kernel	Linux version 2.4.20-pre7	
 Identification Date & Time 	System FPGA	32	
 Keyboard/Mouse 	P5/2 Microcontroller	29	
Eirmware	PS/2 CPLD	2	
Information			
Copyright			
Flash/Firmware			
Management			
 Elash/Eirmware 			
Management			
 Longuit 			
<u> </u>			
onin name-admin(192,168,0,175)			
ser(s) in Web login: admin*,			
ser(s) in VNC login: (Update state)			
rogress: SSL handshake completed.			S Internet
		14	
		V	

Firmware Information

Component	Version / Release	
System firmware	V1L20ES	
CGI Component	V1L20ES	
Linux Kernel	Linux version 2.4.20-pre7	
System FPGA	32	
PS/2 Microcontroller	29	
PS/2 CPLD	2	

3.5.6 **Copyright Notices**

Click Copyright Notices from the menu-selecting area, and the following page is displayed.

Check Copyright information of this product here.



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3.6. Flash/Firmware Management

3.6.1 Flash/Firmware Management

Click <u>Flash/Firmware Management</u> from the menu selecting area, and the following setting page is displayed.

Confirm the current firmware version information and upload new firmware.

noname (192.160.0.100): SERVIS IP-KVM 1p Co	nverter - Microsoft Internet Diplorer		킨×
e Edit Yeen Pavonites Icols Help			æ.,
🕽 Back 🔹 🕥 🕗 💌 😰 🏠 🔎 Seard	h 🤺 Favorites 😧 🙆 🦆 🗔	3	
dress 💩 https://192.168.0.100/nph-the.ogi/ndex_e	s.html	💌 🋃 Go Links	is 30
SE This M	RVIS IP-KVM (FX-7001NP lachine is "noname"@192.1	Series : Version V1L20ES) 68.0.100(00:e0:00:ee:04:03).	
Identification Recent system log entries Set date & time	Flash/Firmware Ma	nagement	
Information Basic	Component	Version / Release	
Information	System firmware	V1L20ES	
 Identification 	CGI Component	V1L20ES	
 Date & Time Keyboard/Mauree 	Linux Kernel	Linux version 2.4.20-pre7	
Firmware	System FPGA	32	
Information	PS/2 Microcontroller	29	
 Copyright 	PS/2 CPLD	2	
Flast/Firmware Management Elast/Firmware Management	Upload New Firmware WARNING: Do not turn of	ff power before the operation completes successfully!	_
• Logout	File to upload:	Browse	-
Login name:admin(192.160.0.175) User(s) in Web login: admin*, User(s) in VNC login: <u>(Update state)</u>			
			-

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Function Details

Flash/Firmware Management

Version Numbers

Component	Version / Release	
System firmware	V1L20ES	
CGI Component	V1L20ES	
Linux Kernel	Linux version 2.4.20-pre7	
System FPGA	32	
PS/2 Microcontroller	29	
PS/2 CPLD	2	

Upload New Firmware

WARNING: Do not turn off power before the operation completes successfully!

File to upload:

Browse...

Upload firmware

System Reboot

After installing new firmware, you may want to reboot:

Reboot Myself

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Click the [Browse...] button, select the file to be uploaded and click [Upload firmware]. The writing starts as follows.

<u>matic).</u>

When finished writing, the following screen is displayed.

Writing to flash
Progress
Starting
File contents: Main Firmware Release date: March 10/2006 Total size: 3829824 bytes
System will reboot once file is written.
Wrote 3829824 bytes of data.
Verifying contents 3829824 bytes (100% okay)
Done (success).
Rebooting
<u>Click here when completed.</u>

-

Click [Click here when completed]. Return to the [Flash/Firmware Management] page and click the [Reboot Myself] button.

There is a risk of device failure if the process is cut off during writing to flash memories. Make sure not to power off the device until the firmware updating is successfully completed.

Wait at least 1 minute before stopping the uploading process (or evaluate whether the uploading process is not working) after clicking the [Upload firmware] button. It is necessary to reboot this product for upgrade. Log on again after rebooting and confirm that the system is upgraded with firmware version information.

For the upload file providing, we will offer consultation separately.

Cautions After the Uploading

It is necessary to clear the old Java Plug-in caches in client PC side after the firmware uploading. If not, the old Java Plug-in activated and firmware uploading is not reflected.

The following is the example of the cache clearing method for Windows 2000.

1. Click [Start] \rightarrow [Setting] \rightarrow and open Java in the [Control Panel] window.

Control Panel				
File Edit View Favorites Tools Help				
🕞 Back 🔹 🌍 👻 🏂 🔎	C Back → O → D Search D Folders D → Y → III →			
Address 🔂 Control Panel	🗾 🔁 Go			
Name 🔺	Comments			
Accessibility Options	Adjust your computer settings for vision, hearing, and mobility.			
🙈 Add Hardware	Installs and troubleshoots hardware			
📸 Add or Remove Programs	Install or remove programs and Windows components.			
administrative Tools	Configure administrative settings for your computer.			
🍓 Automatic Updates	Set up Windows to automatically deliver important updates			
🔗 Date and Time	Set the date, time, and time zone for your computer.			
Splay	Change the appearance of your desktop, such as the background, screen saver, colors, font sizes, and screen resolution.			
Folder Options	Customize the display of files and folders, change file associations, and make network files available offline.			
🛅 Fonts	Add, change, and manage fonts on your computer.			
🛜 Game Controllers	Add, remove, and configure game controller hardware such as joysticks and gamepads.			
Intel(R) Extreme Graphics	aphics Control the graphics hardware features of your system.			
Internet Options	Internet Options Configure your Internet display and connection settings.			
👙 Java	👙 Java Java(TM) Control Panel –			
🖮 Keyt	Customize your keyboard settings, such as the cursor blink rate and the character repeat rate.			
Mouse	Customize your mouse settings, such as the button configuration, double-click speed, mouse pointers, and motion speed.			
Setwork Connections	Connects to other computers, networks, and the Internet.			
bone and Modem Options	Configure your telephone dialing rules and modem settings.			
Sever Options	Configure energy-saving settings for your computer.			
Sprinters and Faxes	Shows installed printers and fax printers and helps you add new ones.			
1				

2. The following [Java Control Panel] window is displayed. Click the [Delete Files...] button.

Java Control Panel	
General Update Java Security Advanced	
About	
View version information about Java Control Panel.	
	About
Network Settings	
Network settings are used when making Internet conne will use the network settings in your web browser. Only modify these settings.	ections. By default, Java y advanced users should
1	Network Settings
Temporary Internet Files	
Files you use in Java applications are stored in a specia later. Only advanced users should delete files or modif	I folder for quick execution y these settings.
Delete File	s Settings
ОК	Cancel Apply

3. The confirmation dialogue is displayed. Click the [OK] button.



Then Java caches are cleared. And the Java VNC connection is activated with the uploaded firmware.

3.7. Operation for General User

The following web page is displayed when logging on as a general user. General users are not authorized to change settings and can confirm only the item displayed on below.

However, general users can use it about the virtual disk function.



Each item displayed in the menu selecting area is the same as the administrators.

3.8. Concurrent Connection of Network Users

Up to 5 users are able to log on to this product and perform VNC connection to the server concurrently.

The first user connected to VNC obtains operation authority.

Behavior of unauthorized network users depends on [Access Sharing Policy] setting.

Refer to 3.3.1.3 Access Sharing Policy (page 79)

If you connected to the VNC but don't have operating authority, all buttons besides [Video-Reset] and [Menu] button are displayed in gray. (Monitoring mode)

Menu M-Resyn Ctl-Alt-Del VirtKeys PS/2 USB KVM KVM-RST Video-RST AutoSync

Even if you move the mouse on to the host server in monitoring mode, the cursor does not move. The mouse clicked or some key entered in this mode, the following window displayed.

View-only a	access.	Mouse	and	keyboard	are	ignored.
	Ta	ke con	trol	now		

Click the [Take control now] button, the following window is displayed and you can obtain the operating authorities. It enables you to operate the host server using the keyboard and mouse.

You now have mouse and keyboard control.

All buttons in the VNC menu bar are displayed.

Menu M-Resyn Ctl-Alt-Del VirtKeys PS/2 USB KVM KVM-RST Video-RST AutoSync

Up to 5 users are able to connect to VNC via the network. If there are already 5 users connecting to VNC, the following dialogue box is displayed and connection is impossible.

é Tight¥NC	
Error: Sorry, max # of users already connected. Connect again to force someone else off the system.	
Java Applet Window	

3.9. Operation by VNC Software

The system of this product supports the following VNC software. The Access method using TightVNC is shown below.

Procedure

 Install TightVNC to the terminal PC in the network and execute the vncviewer.exe.
 Download TightVNC: http://www.tightvnc.com/download.html



2. Enter the IP address of this product and click the [OK] button.



3. Enter administrator password (default: admin) and click the [OK] button.



- Economic Constraints Constrain
- 4. The following Viewer is started.

Operating method for the menu bar is the same as Java VNC.

Chapter 4 - Specifications

This chapter provides the specifications, operating conditions and detailed information about this product.

Contents

4.1 Product Specifications	page 140
4.2 RJ45 Connector Signal Assign	page 141
4.3 Operational Environment	page 141
4.4 Optional Accessories	page 141

4.1. Product Specifications

Items			
Product Name		SERVIS IP-KVM 1p Converter	
Model Number		FX-7001NP	
Number of Managing Server		1	
Number of Cor	ncurrent	Network Connection: 5 users (Only 1 user is allowed to	
Connections		operate).	
		Local: 1 user (Local user controls exclusively)	
CPU	Туре	32bit CPU	
	Clock	200MHz	
Memory	Main	32MB	
Ethernet	Туре	10BASE-T, 100BASE-TX	
	Supported	IP, ICMP, TCP, UDP, FTP, DHCP,	
	Protocol	VNC, VNCS (ssh tunneled VNC), HTTP, HTTPS,	
		SYSLOG, DNS, SSL, SSH	
	Security	SSL (RC4, MD5), SSH, Firewall	
Console	Туре	Signal Standard: RS-232C	
	Supported Speed	115.2kbps	
Connector	Ethernet	RJ45 x 1	
	Console	RJ45 x 1	
	Local	D-sub15 x 1	
		mini-DIN6 x. 2	
	Server	D-sub15 x 1	
		mini-DIN8 x 1	
		USB x 1	
	Power	DC5V Power Adapter x 2 (Redundant power supply	
		supported).	
Supported Vide	eo Resolution	640 x 480 (60Hz, 72Hz, 75Hz, 85Hz)	
(Server)		800 x 600 (60Hz, 72Hz, 75Hz, 85Hz)	
		1024 x 768 (60Hz, 70Hz, 75Hz, 85Hz)	
		1152 x 864 (75Hz)	
		1280 x 960 (60Hz, 85Hz)	
		1280 X1024 (60Hz, 75Hz, 85Hz)	
Vintural Otana and		1600 X 1200 (60HZ, 75HZ, 85HZ)	
virtual Storage	(USB disk)		
		8MB RAM disk	
Dook Mount		CD-ROW (ISO IIIES)	
Rack Mount			
Configuration		Metal case, black coating	
Power Supply	Input Rating		
	Power		
	Consumption		
Dimensions		193 x 124 x 40	
Weight		785 (The main device only)	
	1 131		

4.2. RJ45 Connector Signal Assign



Terminal Number	Console	Ethernet
1	RTS	TX+
2	NC	TX-
3	TxD	RX+
4	GND	NC
5	GND	NC
6	RxD	RX-
7	NC	NC
8	CTS	NC

Ethernet Port

4.3. Operational Environment

Items			
Ambient Temperature	While operating: 0 to 40°C		
-	While being stored: -20 to 60°C		
Ambient Humidity	While operating: 10 to 80% RH (no condensation)		
	While being stored: 5 to 90% RH (no condensation)		
	Temperature conditions: For 40°C or under, maximum 90% RH		
	: For 40 to 60°C, inversely proportional		
	until 50% RH		
Vibration Resistance	JIS C 0040 (10 to 55 to 10Hz/min, 1.5mm)		
Shock Resistance	JIS C 0041 (10G to 11ms)		
Conformance	FCC class B, VCCI, cTUVus, CE		
Electrostatic Resistance	Testing Standard : IEC61000-4-2		
	Body : Contact - At least ±6 kV		
	: Air - At least ±8 kV		
	RJ45 signal line : Contact - At least ±2 kV		
	: Air - At least ±2 kV		

4.4. Optional Accessories

Name	Model Number	Note
Composite cable for server connection (2m)	NC70005-2001RS	
USB cable (2m)	NC70002-2001RS	
RJ45–D-Sub 9-pin Cross Conversion Adapter	FP-AD009RJX	One adapter is attached.
RJ45–D-Sub 25-pin Cross Conversion Adapter	FP-AD025RJX	One adapter is attached.
AC Cable for USA	NC14004-B077	
AC Cable for EUROPE	NC14004-B078	
AC Cable for UK	NC14004-B079	

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Chapter 5 - Troubleshooting

This chapter provides problem-solving method that may occur when using this product.

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5.1. Troubleshooting

This section provides examples of possible problems and methods for solving while using this product.

5.1.1 LED Confirmation

• Did you check LEDs at front/rear of this product?

Check LEDs at front/rear of this product if trouble occurs. By using LEDs, it is possible to monitor power supplies and network problems. Refer to 1.3.1 Rear (page 4) Refer to 1.3.2 Front (page 6)

Section	LED	Status	Problem Solving
1	Power	Off	Power adapter might be disconnected.
	LED		Connect the power adapter.
2	Ethernet	Off	Ethernet port link is not established.
	Link LED		Check the connection with network devices such
			as router and hubs etc.
3	Ethernet	Off	This LED blinks when network access to this
	Act LED		product is occurred.
			If access failure occurs, the LED turns off.

5.1.2 Cannot Power On the Device

• Is the power adapter connected?

Make sure to use the provided power adapter.

• Is power being supplied to the outlet?

5.1.3 Cannot Access the Serial Console

• Is the serial connection setting correct?

Make sure to set emulator application (Tera Term, etc.) connection as follows.

Conditions for Communication	Value
Baud Rate	115200bps
Data Length	8bit
Parity	none
Stop Bit	1bit

Are you using the correct conversion adapters and cables?

Check the conversion adapters (D-sub–RJ45, etc.) and cables being used support serial console COM port. Optional conversion adapters are available. Refer to 1.5.4 Serial Console Connection (page 12)

5.1.4 Cannot Operate the Device Locally

• Are the video monitor, keyboard and mouse correctly connected?

Make sure that they are connected to the local port. Refer to 1.5.2 Connection to the Host Server (page 10)

5.1.5 Cannot Access the Web page

• Is the UTP cable shorter than specified limits?

The 10BASE-T and 100BASE-TX cable length must be shorter than 100m. Make sure they are no longer than that.

• Is the cable correctly connected?

Make sure that the Cat5 cable is connected to the Ethernet port. Refer to 1.5.2 Connection to the Host Server (page 10)

If the network link is established, the LED in front of the device is on.

• Is the network device power on?

• Is the IP address specified?

Check the specified IP address using the serial console. If not, specify the IP address using serial console. Refer to 2.2 Set the IP Address (For Initial Installation) (page 15)

5.1.6 Cannot Login to the Setting Page

• Is Cookie enabled?

If you disabled cookie in the browser such as Internet Explorer, Mozilla, Firefox, Opera, and Netscape, you cannot login to the setting page.

Cookie setting method is described below.

For Internet Explorer 6.0

Click [Tools] menu \rightarrow [Internet Options] and the following dialogue box is displayed.Click [Privacy] tab and move the slider to setup of cookie in the dialogue box.

Move the slider except for the setting of "Block All Cookies" and click [OK] button.



5

Troubleshooting

5.1.7 VNC Connection is not Performed

• Is the Java applet installed?

If the VNC connection is not performed from the web page, make sure that the Sun Java applet is installed in the remote terminal unit.

For Internet Explorer 6.0
Click [Tools] menu \rightarrow [Internet Options] \rightarrow [Advanced] tab to confirm
that Java Sun [Use JRE 1.x.x xx for <applet> (requires restart)] is</applet>
checked. (x is version No.).
Internet Options
General Security Privacy Content Connections Programs Advanced
Settings:
HTTP: 1 settings
🖕 Jaya (Sun)
🖉 🖬 Use JRE 1.5.0_05 for <applet> (requires restart)</applet>
Multimedia
Don't display online media content in the media bar
Enable Automatic Image Resizing
Enable Image Tooldal (requires restart) Play animations in web pages
Play sounds in web pages
Play videos in web pages
Show image download placeholders
Show pictures
📃 🗹 Smart image dithering
Viring
Bestore Defaults
OK Cancel Apply

If not installed, download the Java applet from the following web site and install it.

http://www.java.com/ (Download page for the Sun Microsystems and Java software).

Troubleshooting

Network Error is Displayed

If the following error is displayed and the VNC window closes every time the VNC connection is performed, reset (disconnect and reconnect the power adapter) this product.

🛓 noname	
Network error: remote side closed connection	
Java Applet Window	

If you connected via the network, click the [Reboot Myself] button in the firmware management page.

Flash/Firmware Management

Version Numbers

Component	Version / Release		
System firmware	V1L20ES		
CGI Component	V1L20ES		
Linux Kernel	Linux version 2.4.20-pre7		
System FPGA	32		
PS/2 Microcontroller	29		
PS/2 CPLD	2		

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Upload New Firmware

WARNING: Do not turn off power before the operation completes successfully!

File to upload:	
	Browse
Upload firmware	

System Reboot

After installing new firmware, you may want to reboot:



After rebooting, log on to the device from the web page again and perform the VNC connection.

5.1.8 The Numeric Keypad Does Not Work Properly

• Are the NumLock LEDs in the remote terminal and VNC screen in the same status?

If the NumLock LED status in the VNC menu window is not same as that in the remote terminal unit, the Numeric Keypad does not work properly.

	x
System ID	-Server Info
Mouse Resyn	Host power:ON
PS/2 Reset	Video mode:800x600 @ 60Hz
USB Menu	KB mouse I/F:PS/2USB
Video Reset	LED State:[Num][Caps][Scr]
Take Ctrl	Machine Info
Video Tune	Power In: 1:unpluged 2:pluged
VirtKeys	My IP:192.168.0.100
Disk Ctrl	Time: 1 May 2006 06:09:30 +0000
Menu Bar	-Tx Info
KVM Menu	Tx rate/delay:31 Kbps/56.4ms
	B/W:: Min Avg Fast Auto
	- Thumbnails
	Thumbnails: 1/2 1/4 1/8 1/16

Click NumLock once out of the VNC screen to conform the setting.

5.1.9 The Mouse Does Not Work

• Perform [PS/2 Reset] or [USB Replug].

If the USB keyboard/mouse is disabled (connecting PS/2 status), click the [PS/2 Reset] button in the VNC menu window to reset PS/2 emulation.

If the USB keyboard/mouse is enabled, click the [USB Menu] button in the VNC menu window and display the USB Menu window. Click the [do] button in the USB Replug and disconnect and reconnect the USB connection.

5.1.10 Mouse Cursor is Not Move Coinstantaneously

• Are the [Acceleration] settings and the [Move to Default Button] settings for the host server mouse disabled?

To align the remote terminal and host server cursors, disable [Acceleration] and the [Move to Default Button] settings.



For RedHat Linux (GNOME) Based Host Server. Click [Preferences] - [Mouse] and display the mouse preferences.
\rightarrow Aceleration: Middle (For slowish side)
Mouse Preferences
Buttons Cursors Motion
Speed
Acceleration: Slow Fast
Sensitivity: Low High
Set the speed of your pointing device.
Drag and Drop
Threshold: Small Large
Set the distance you need to move your cursor before dragging an item.
S Help X Close

• If the PS/2 keyboard/mouse is enabled.

When the PS/2 keyboard/mouse is enabled and the host server is Windows OS based, before log in the mouse cursor will not align.

5.1.11 Fail to Recognize the Virtual Disks

• Perform USB Replug

If the access error occurred in VNC screen click [Menu] and [Disk Ctrl] button in the VNC menu bar to display disk operating window, click [USB Replug] button. After that operation, click the [Insert] button and check whether the host server recognizes the virtual disk.

	x
Status:Inserted: 1.44M Floppy	
Access:0/0 (r/w) Insert Eject USB Replug	

5.1.12 Host Server Mouse Moves Slow

Adjust the transmission capacity in the band width setting

Click [Menu] button in the VNC menu bar to display the menu window. Click the B/W: button and perform the band width setting.

Each setting button corresponds to the following value.

- [Min]: Specify the capacity of transmission to below 700kbps.
- [Avg]: Specify the capacity of transmission to below 4Mbps.
- [Fast]: Specify the capacity of transmission to below 12Mbps.
- [Auto]: This product sets the value automatically.

If you feel the host server display speed is slow from mouse pointer movements, specify the value as [Avg] or [Fast].

	<u>x</u>
System ID	-Server Info
Mouse Resyn	Host power:ON
PS/2 Reset	Video mode:800x600 @ 60Hz
USB Menu	KB mouse I/F:PS/2USB
Video Reset	LED State:[Num][Caps][Scr]
Take Ctrl	Machine Info
Video Tune	Power In: 1:unpluged 2:pluged
VirtKeys	My IP:192.168.0.100
Disk Ctrl	Time: 1 May 2006 07:51:18 +0000
Menu Bar	-Tx Info
KVM Menu	Tx rate/delay:20 Kbps/57.2ms
	B/W:: Min Avg Fast Auto
	- Thumbnails
	Thumbnails: 1/2 1/4 1/8 1/16

• Perform VNC login (faster)

Unencrypted VNC connection improves the processing speed.

Click [VNC login and Timer] \rightarrow [Display VNC login (faster)] and "Accept "in [Display VNC login (faster) at menu item].

Display VNC login (faster)	
Display VNC login (faster) at menu item:	Reject 💌
VNC Password Policy	Reject

The item "VNC login (faster)" is displayed after selecting "Accept" as below.



Click "<u>VNC login (faster)</u>" to connect VNC without encryption. Keep in mind are inferior in respect of security.

Specify the noise filter setting. •

Image data transmitted from host server includes noise. It increases the volume of transmit data and operation may be delayed.

Click the [On] button of the Noise Filter setting in the Video Tune window. Specify the value between 1 and 31 for transmission rates. \uparrow : Increase the filtering value, \downarrow : Decrease the filtering value

				x
-H-V Position				
$\begin{array}{c} \bullet \\ \bullet \\ \bullet \end{array} \rightarrow \underline{}$	efault	Auto	Save	
- Color Offset & Gain				
Fa	actory	Auto	Save	Advanced
- Sampling Phase				
Current phase:23	3/32	Auto		
-All Settings				
Changes/frame:-r	nil-	Auto I	Everyth	iing
-Noise Filter				
On Off 🛧 🚽	▶ Filte	ring:	3	

• Perform auto-setting for the Sampling Phase

Auto setting of the Sampling Phase improves the processing speed.

X
· · · · · · · · · · · · · · · · · · ·
← → Default Auto Save
•
- Color Offset & Gain
Factory Auto Save Advanced
Sampling Phase
Current phase:23/32 Auto
-All Settings
Changes/frame:1.00 Auto Everything
Noise Filter
On Off 🛧 🕹 Filtering:Off

The following dialogue box is displayed and auto-setting is performed.

Video adjusting (for phase)
85%

5.1.13 Increase Image Quality

• Perform auto-setting of Video Tune.

Optimize the image quality to improve processing speed. Click the [Menu] button in the VNC menu bar to display menu window. Click the [Video Tune] button and the Video Tune window is displayed.

	x
System ID	Server Info
Mouse Resyn	Host power:ON
PS/2 Reset	Video mode:800x600 @ 60Hz
USB Menu	KB mouse I/F:PS/2USB
Video Reset	LED State:[Num][Caps][Scr]
Take Ctrl	Machine Info
Video Tune	Power In: 1:unpluged 2:pluged
VirtKeys	My IP:192.168.0.100
Disk Ctrl	Time: 1 May 2006 06:12:01 +0000
Menu Bar	-Tx Info
KVM Menu	Tx rate/delay:
	B/W:: Min Avg Fast Auto
	- Thumbnails
	Thumbnails: 1/2 1/4 1/8 1/16

Display the following test pattern on the host server.



Obtain the test pattern for Video Tunes from the URL below. Then prepare this pattern in the host server. https://IP address for this product/images/pattern.png



Click the [Auto Everything] button in the All Setting item of the video tune window.

[Found test pattern. Working...] dialogue box is displayed during the auto-setting as follows. The setting takes about 20 seconds.



Click [Save] button after the [Auto Everything].

Troubleshooting

Specify the noise filter setting •

Image data transmitted from the host server includes noise. It increases the volume of transmit data and operation may be delayed.

Click the [On] button of the Noise Filter setting in the Video Tune window. Specify the value between 1 and 31 for transmission rate. \uparrow : Increase the filtering value, \downarrow : Decrease the filtering value

	<u> </u>	
-H-V Position		
← + Defau	Ilt Auto Save	
- Color Offset & Gain		
Facto	ory Auto Save Advanced	
- Sampling Phase		
Current phase:23/32	Auto	
-All Settings		
Changes/frame:-nil-	Auto Everything	
-Noise Filter		
On Off 🛧 🕂 Filtering: 3		

• Tune the Offset and Gain value

Click the [Menu] button in the VNC menu bar to display the menu window. Click [Video Tune] \rightarrow [Advanced] button, tune Red, Green and Blue offset and Gain value in the following window.

		x		
Presets 1 2 3 4 5 6 7 8 9 10 Color Offset & Gain	11 12 13 14 15	16 Factory		
Red	Green	Blue		
Offset: [«- 62 +»] def +2 mV Gain: [«-102 +»] def 700 mV	[«- 62 +»] <u>def</u> +2 mV [«-102 +»] <u>def</u> 700 mV	[«- 66 +»] <u>def</u> -8 mV [«-102 +»] <u>def</u> 700 mV		
Save->Preset Auto Offset & Gain — Sampling phase Sampling phase:23/32 = 258° [«-Auto+»] — Performance				
Changes/frame:-nil- Flatness:74.9% — For Debug Regrab screen Show diffs				

Click the following symbols to change the value.

Symbol	Setting value
*	Decrease the setting value (-10)
-	Decrease the setting value (-1)
*	Increase the setting value (+10)
+	Increase the setting value (+1)
Γ	Offset: The value is set to 0.
-	Gain: The value is set to 0.
1	Offset: The value is set to 127.
-	Gain: The value is set to 255.

Adjust the Red, Green and Blue Offset and Gain value with monitoring the display.

Click the [Save->Preset] button to save the new setting. After the [Save->Preset] button is displayed in gray, click any number button of 1 to 16. The new setting saved in that number.

5.1.14 Specify a Notebook Computer as Host Server

Check specifications for the external video output

Enable the use of the external video output to use a notebook computer as a host server. Some notebook computers do not support the external video output in any

mode.

Refer to the user's manual for the notebook computer.

5.1.15 Error during the Firmware Uploading

• If this product does not start up, disconnect the connector once

When the [FAILED] message is displayed as follows while firmware is uploading in [Flash/Firmware Management] of the web page, this product may not be started up.

Writing to flash Progress

```
Starting...
File contents: PS/2 Micro (2)
Release date: December 20/2005
Total size: 10874 bytes
Upgrading on-board PS/2 Microcontroller (2).
Unable to sync w/ MOT.
FAILED
Update failed: chip may now be corrupt (so try again).
Done (FAILED).
Click here when completed.
Click here for page reload (if not automatic).
```

Perform following recovery method in such a case.

Recovery Method

Disconnect the power adapter and PS/2 connecter from the server. And then reconnect the power adapter and PS/2 connecter to the server in this order.



Connect to the host server from the remote terminal and make sure that the keyboard and mouse work properly.

If the product does not operate properly after using these recovery methods, please contact Fujitsu Comportment Customer Service and Support Center.

5.2. Technical Support

< Inquiry about our products>

FUJITSU COMPONENT LIMITED Marketing Department TEL: 81-3-5449-7006, Fax: 81-3-5449-2626

E-mail: promothq@fcl.fujitsu.com URL: http://www.fcl.fujitsu.com/en/

< Inquiry about repairs and failures>

FUJITSU COMPONENT LIMITED Customer Service & Support Center TEL: 0120-810225 *Contact by mobile phones, automobile telephones and PHSs are supported. E-mail: <u>servis-center@fcl.fujitsu.com</u> Business Hours: 9:00 - 12:00, 13:00 - 17:00 (Every day except Saturdays, Sundays and public holidays.)