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# *WEB CONSOLE SECTION*

# Contents

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# 1. Before using Web Console

To use Web Console on an SVP, it is required to set Internet Explorer and the IP address.

## 1.1 Setting Internet Explorer

(1)  Double click the Internet Explorer icon on the desktop of the SVP.

Internet
Explorer

(2)  Since the following dialog window are displayed, select "I want to set up my Internet connection manually, or I want to connect through a local area network [LAN]." and press the Next button.
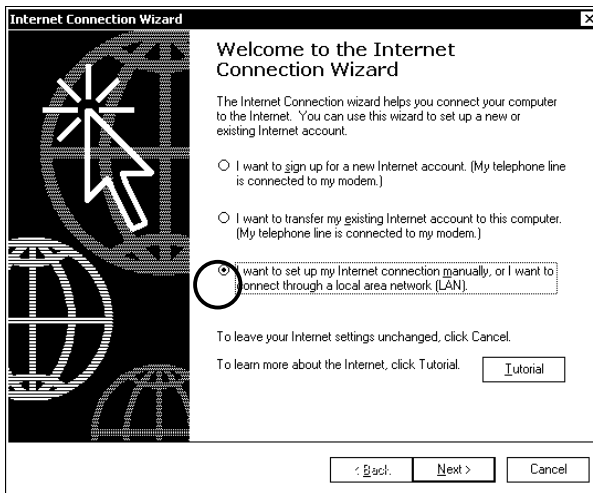


(3)  Select "I cannot through a local area network [LAN]" from the following dialog window and press the Next button.

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|-------|----------|--|--|--|--|--|
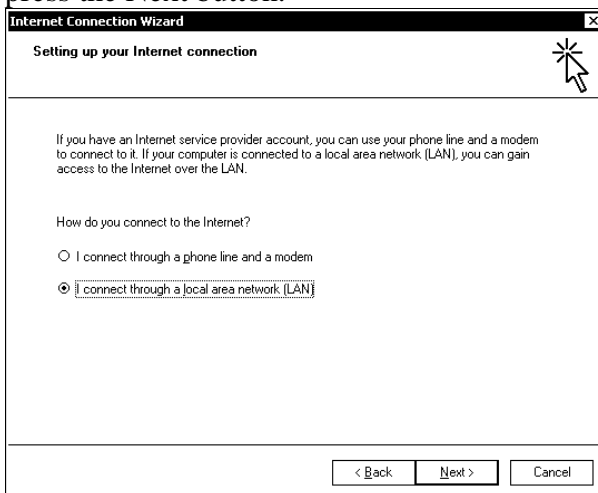
(4) In the following window, press the Next button without doing any other thing.
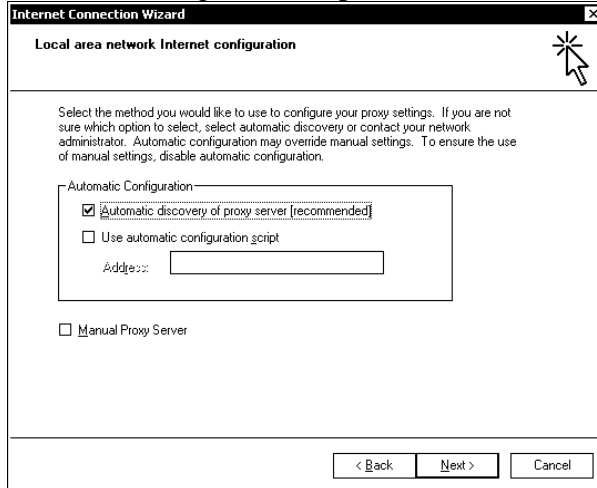


(5) In the following window, select No and press the Next button.
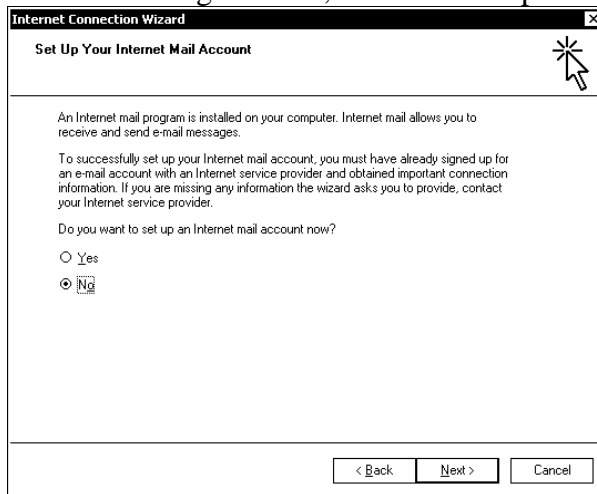


(6) Press the Finish button in the following window.

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|-------|----------|--|--|--|--|--|
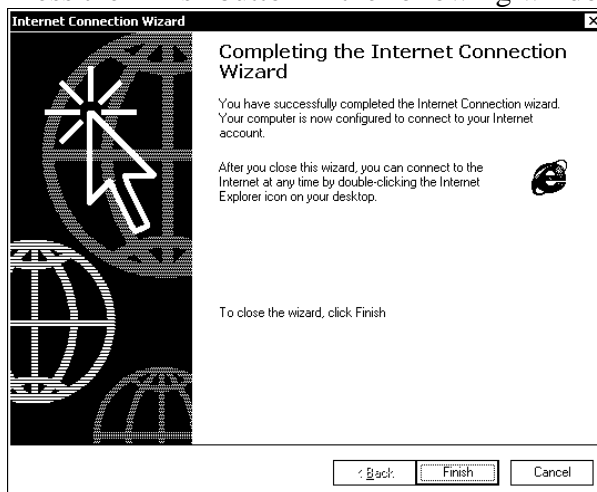
(7) Internet Explorer is displayed.
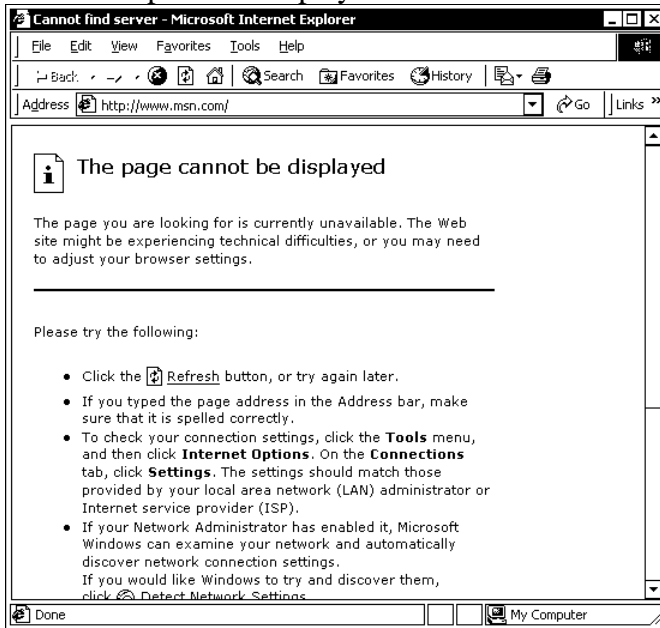


(8) Select View, Toolbars, and Standard Buttons in this order and select View, Toolbars, and Address Bar in the same way, and then remove the check marks of them.
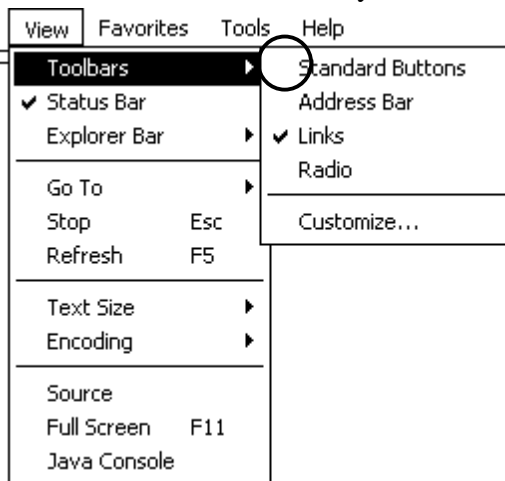


(9) Select Close from the File menu.

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## 1.2 Setting IP Address

When using Web Console from a remote personal computer or using the SNMP Agent function, a connection to an external LAN and a setting of a network is required.

External LAN

Power Switch
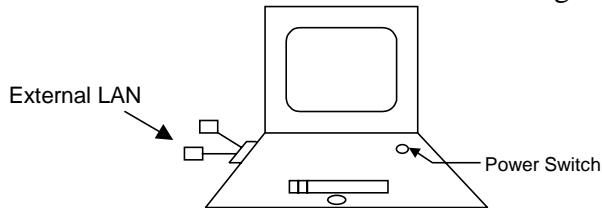
(1) Open the Properties window by clicking the My Network Places icon on the desktop with the right mouse button.

My Network
Places

(2) The following window is displayed.
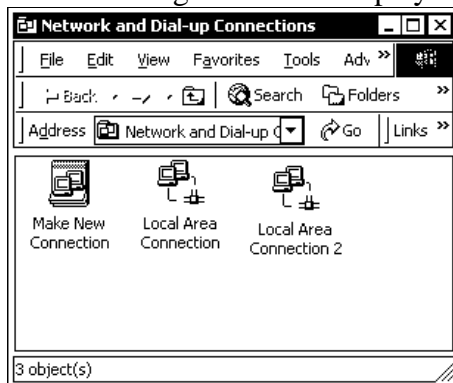
Select Properties by clicking Local Area Connection 2 with the right mouse button.

(3) Since the following is displayed, select TCP/ IP and press the Properties button.

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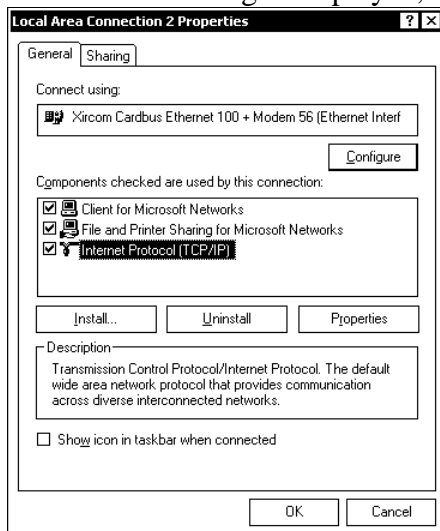
(4) Select necessary information in the following window.
Because the information is peculiar to each user, make the setting getting technical assistance of an administrator on the user side.

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# 2. Web Console

Some of the existing functions were replaced with Web Console in the RAID450 and the subsequent subsystems.

① Remote Console was replaced with Web Console.

② Each function of the SVP launcher is realized through a pressing of the Web Console button and a selection of one of the following functions.

| Name of button on former launcher | Selection to be done after pressing the Web Console button |
|---|---|
| IP Security | Information / Status — Information or License key / SNMP / Just in Time — SNMP Information |
| HIHSM/ PPC | Performance Monitor / Cruise control / PPC |
| HORC | True Copy |
| HOMRCF | HOMRCF Shadow Image |
| HRC | HRC True Copy — Main frame |
| HMRCF | HMRCF Shadow Image — Main frame |
| HPAV | HPAV Hitachi Parallel Access Volume |
| On-Demand | License key / SNMP / Just in Time — Just in Time |

## 2.1 Specifications of Raid Information Service Display

Activate RISMAN, that is a program for accepting requests of a client and for performing high-speed processing through having structures of the RMI server and RAID in the memory, in order to make Web Console operate.

RISMAN displays statuses of the functions as shown below.

```
Raid Information Service Display          _ □ /

Start Time  :  2002/4/12 15:34:41:469

Status:      Processing.

Function Name        Status             ErrorCode    ▲
■ DKC                Ready(OK)          0
■ Base               Ready(OK)          0
▨ HIC(DKC)           Initialize(Start)  0
▨ HIC(Monitor)       Not Initialize     0
▨ HIC(HIHSM)         Not Initialize     0
▨ HIC(PPC)           Not Initialize     0            ▼
◄                                              ►
```
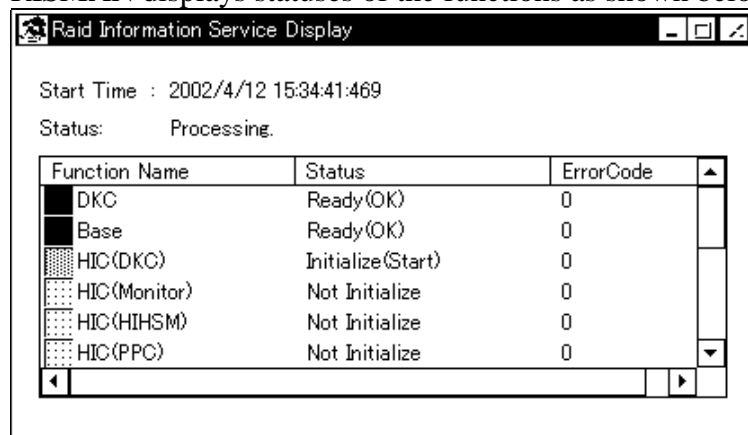
Web Console cannot operate until all the statuses above become Ready(OK).

• Start Time: Time when RISMAN was activated.

• Status: Processing is displayed when RISMAN has the right of maintenance or Ready when it has not. (The mode can be changed to Modify even in the Processing status, however, a maintenance work cannot be done.)

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|---|---|---|---|---|---|---|

- Function Name

| | Name | Description | Part code |
|---|---|---|---|
| 1 | DKC | Displays whether the DKC is ready or not. | 0002 |
| 2 | Base | Displays the status of the memory management of configuration information of the LUNM/ LUSE/ CVS/ DCR function. | 0003 |
| 3 | HIC(DKC) | | 8005 |
| 4 | HIC(Monitor) | Displays the state of initialization of the Base Monitor function. | 5105 |
| 5 | HIC(HIHSM) | Displays the state of initialization of the HIHSM function. | 5205 |
| 6 | HIC(PPC) | Displays the state of initialization of the PPC function. | 5305 |
| 7 | HIC(OnDemand) | Displays the state of initialization of the On-Demand function. | 0505 |
| 8 | HIC(SNMP IP) | Displays the state of initialization of the SNMP Information function. | 0305 |
| 9 | HIC(HORC) | Displays the state of initialization of the HORC function. | 6005/6105 |
| 10 | HIC(HOMRCF) | Displays the state of initialization of the HOMRCF function. | 7005/7105 |
| 11 | HIC(Key Licence) | Displays the state of initialization of the Key License function. | 0405 |
| 12 | HIC(HPAV) | Displays the state of initialization of the PAV function. | 9005 |
| 13 | HIC(E-Copy) | Displays the state of initialization of the E-Copy function. | 9505 |

- Status

| | Display | Color | Meaning |
|---|---|---|---|
| 1 | Not Initialize | Gray | Initialization is not started yet. |
| 2 | Initialize(Stat) | Yellow | Initialization is in progress. |
| 3 | Initialize (Retry) | Yellow | Initialization failed and it is being retried. |
| 4 | Ready(OK) | Blue | Ready for operation |
| 5 | Refresh(Start) | Green | Refreshment is in progress. The internal buffer is being initialized after a writing from the SVP/ SNMP/ Web Console has been completed. |
| 6 | Refresh(Retry) | Green | Refreshment failed and is being retried. |
| 7 | Initial(Error) | Red | Initialization failed. (It is retried every other minute) (*1) |
| 8 | Refresh(Error) | Red | Refreshment failed. (It is retried every other minute) (*1) |

Notes:
- Any of the statuses is Initialize(Stat)/ Refresh(Start)/ Initialize(Retry)/ Refresh  (Retry), no maintenance work can be done from an SVP.
- When an initialization or refreshment operation fails, a retrial operation is performed. When you want to do a maintenance work, do it when the Status is Ready. (Otherwise, an SVP rebooting, which is done after executing Define Information Files or All Configuration Files for alteration of the Config, may fail.)
- While an SVP maintenance work is being done, an initialization or refreshment operation fails and the status becomes Retry. When the maintenance work is completed, close the SVP window immediately.
- Operation of Web Console for a part whose status is not Ready(OK) cannot be done.

(*1):  When xxxx (Error) status is displayed for more than 2 minutes without, there may be a problem just on display.
   If you can reboot by pressing Web Console button and can press the each function button normally, there is no problem.
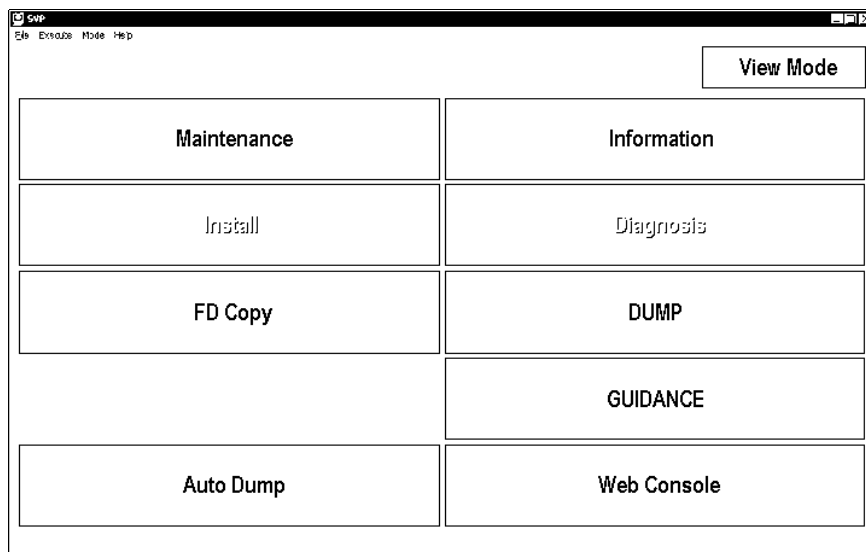
- Error Code
  When an error occurs, its error cord is displayed.
  Refer to errors which occur in each part shown in the list of Web Console messages.
  (Part codes are listed in the item of Function Name.)

## 2.2 Procedure for Activation Using SVP



(1) The Web Console button is effective only when the SVP is in the View mode. (The Web Console button is grayed in the Modify mode.)

(2) When the Web Console button is pressed, the following window is displayed.
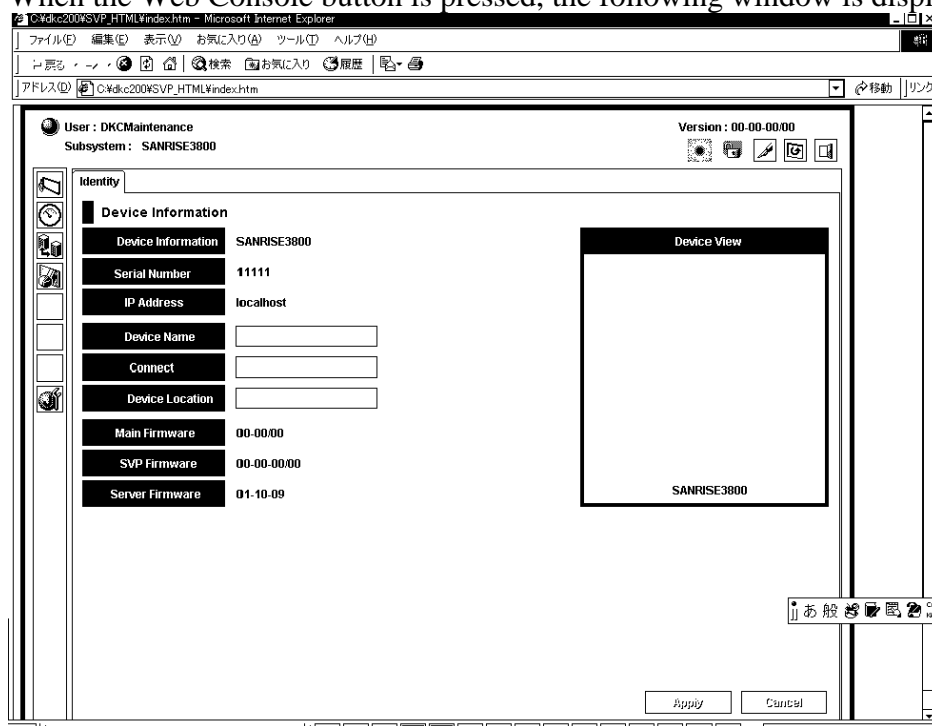


Note: Do not activate Web Console from the SVP by specifying the URL on Internet Explorer.
Only the following functions of Web Console are valid on the SVP.
When program product is nothing on the SVP, refer to "2.1 Specifications of Raid Information Service Display".

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|---|---|---|---|---|---|---|---|

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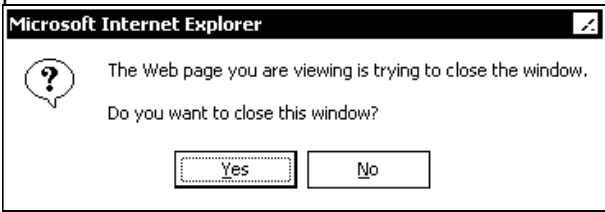
| | Function | Reference | Button |
|---|---|---|---|
| 1 | Performance Monitor / CruiseControl / PPC | Performance Management User's Guide | |
| 2 | TrueCopy | TrueCopy User's Guide | |
| 3 | ShadowImage | ShadowImage User's Guide | |
| 4 | TrueCopy-Mainframe | TrueCopy-Mainframe User's Guide | |
| 5 | ShadowImage-Mainframe | ShadowImage-Mainframe User's Guide | |
| 6 | HITACHI Parallel Access Volume | Hitachi Parallel Access Volume User's Guide | |
| 7 | Extended Copy Manager | Extended Copy Manager User's Guide | |
| 8 | Just in Time | Web Console Web Console User's Guide | To use this function, press the License key / SNMP / Just in Time ( ) button and select the On-Demand tab. |
| 9 | SNMP Information | Web Console Web Console User's Guide | To use this function, select the Identity tab after pressing the status ( ) button and "4. Installing SNMP Agent", select the SNMP Information tab after pressing the Install ( ) button. |
| 10 | Export Function | Web Console Web Console User's Guide | |
| 11 | FTP Client Function | Web Console Web Console User's Guide | |

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|---|---|---|---|---|---|---|

Table 2.1  Operation of nothing P.P

| Base Monitor | Reference | ○ |
|---|---|---|
| CruiseControl | Reference | ○ |
| | Setup | × |
| | Cancellation | ○ |
| PPC | Reference | ○ |
| | Setup | × |
| | Cancellation | ○ |
| TrueCopy/ TrueCopy-Mainframe | Reference | ○ |
| | Setup | × |
| | Cancellation | ○ |
| ShadowImage/<br> ShadowImage-Mainframe | Reference | ○ |
| | Setup | × |
| | Cancellation | ○ |
| Hitachi Parallel Access Volume | Reference | ○ |
| | Setup | × |
| | Cancellation | × |
| Extended Copy Manager | Reference | ○ |
| | Setup | × |
| | Cancellation | ○ |

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## 2.3 Specifications Common to Functions of Web Console

| | Name | Icon | |
|---|---|---|---|
| 1 | Status lamp | ● icon in the upper left part of the window | Indicates a status of the DKC with a color: Blue: Normal, Yellow: Warning, or Red: Abnormal. When it becomes red or yellow, see the Maintenance on the SVP. |
| 2 | Subsystem | | Shows a nickname of the DKC. |
| 3 | Version | | Shows a version of Web Console. |
| 4 | Waiting | (icon) | The icon rotates during the operation started by a pressing of the Refresh button following a pressing of the Apply button. The icon stops its rotation when the refreshment operation is completed. |
| 5 | Exclusive Lock icon | (icon) | Shows statuses of operation mode (View or Modify mode) of users who have logged in the SVP. Blue: All users make access in the View mode. Red: Some of users including you set the Modify mode. **Note: While performing a maintenance work using an SVP or using the SNMP in the Modify mode, contents displayed on Web Console may be old or incorrect.** |
| 6 | Operation mode switching icon | (icon) | Switches the operation mode between the View and Modify modes. When you move the mouse close to this icon, the current operation mode is displayed. To change the operation mode, press this button. The sunk button shows that the mode is set to Modify. |
| 7 | Refresh button | (icon) | Updates Web Console to the latest state. However, it is not updated when any one of other users uses it in the Modify mode. |
| 8 | Quit button | (icon) | Quits Web Console. Since the following message is displayed after the confirmation message is issued, press the Yes button. <br><br> **Microsoft Internet Explorer** <br> (?) The Web page you are viewing is trying to close the window. <br> Do you want to close this window? <br> [ Yes ] [ No ] |

---

### ⚠ CAUTION

Do not quit Web Console by pressing the × button of the browser or double clicking the small icon at the upper left position. In case you have quitted Web Console in this way, activate it again after the RMI time-out (six minutes in default).

---

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|---|---|---|---|---|---|---|

## 2.4 Before Using Web Console (You are requested to read this without fail.)

2.4.1 Notes on Using the Web Console PC

You must use the mouse to perform general Web Console operations. You can select an object (item on a panel) by clicking the object using the mouse. You can also display the command(s) by right clicking while selecting object(s) using the mouse.

Keep the following notes and restrictions in mind when you perform Web Console operations on the Web Console PC:

■ You cannot use the mouse wheel for performing Web Console operations.

■ You cannot use the **Home**, **End**, and **Delete** keys for Web Console operations.

■ Please do not close Web Console panels by:
   – Clicking the ⊠ button on the panel,
   – Using the commands such as **File** and **Exit** on the Web browser, or
   – Pressing the **Alt** and **F4** keys.

Note: If you accidentally close the panels by the method above, wait for an RMI time-out (default is 1 min.), and then restart the Web Console.

■ Please do not use the shortcut keys such as **F5**, **Ctrl**+**F**, **Esc**, and **Ctrl**+**A** for Web Console operations. The **F5** key will exit and restart the Web Console.

■ For Java applet security, you cannot copy and paste objects (text) from other applications during Web Console operations.

■ The layout of a Web Console panel is reset when you click the **Apply** button or **Refresh** button (⊡), or when you switch tabs.

■ On the Web Console panels, you may hold multiple settings or operations before actually applying those settings or operations to the RAID450 subsystem by clicking the **Apply** button. However, if you apply too many settings at once, the server might become overloaded and an error might occur. To avoid an error, do not apply more than 1,000 settings at a time.

■ After dragging and dropping objects to another location or area, you might not be able to use the scroll bar on that location or area. In this case, close all panels including the Storage Device List panel, and then log on to the Web Console again.

■ You cannot drop an object to an area or location where no object exists.

Note: Even if you try to drop an object to an invalid area or location, no warning icon is displayed.

■ To select, drag and drop objects that are adjacent to each other, you must continue to hold down the **Shift** key to select a group of objects that are adjacent to each other, and then hold down the **Ctrl** key when you select the last object in the group. Continue to hold down the **Ctrl** key when you drag and drop the selected objects.

■ To select, drag and drop objects that are not adjacent to each other, you must continue to hold down the **Ctrl** key to select a group of objects that are not adjacent to each other.

The following examples illustrate the procedures above, using the objects shown in Figure 2.4.

To drag and drop adjacent objects (No. 2 to No. 5) in Figure 2.4 (left):

(1) While continuing to hold down the **Shift** key, click No. 2 **Object B** and No.4 **Object D**. The objects No. 2 to No. 4 are selected.

(2) Hold down the **Ctrl** key, click No. 5 **Object E**. The No. 5 object is also selected. The objects No. 2 to No. 4 remain selected.

(3) Place the mouse pointer on the No. 5 object and hold down the **Ctrl** key and the left mouse button. Next, drag the selected objects (No. 2 to No. 5) to the desired location.

To drag and drop non-adjacent objects (No. 2 and No. 5) in Figure 2.4 (right):

(1) Hold down the **Ctrl** key, click No. 2 **Object B** and No. 5 **Object E**. The objects No. 2 and No. 5 are selected.

(2) Place the mouse pointer on the No. 5 object and hold down the **Ctrl** key and the left mouse button. Next, drag the selected objects (No. 2 and No. 5) to the desired location.

| No. | Object | | No. | Object | |
|---|---|---|---|---|---|
| 1 | Object A | | 1 | Object A | |
| 2 | Object B | | 2 | Object B | |
| 3 | Object C | | 3 | Object C | |
| 4 | Object D | | 4 | Object D | |
| 5 | Object E | | 5 | Object E | |
| 6 | Object F | | 6 | Object F | |
| 7 | | | 7 | | |
| 8 | | | 8 | | |

Figure 2.4  Selecting Multiple Objects (Left:  Adjacent, Right:  Non-Adjacent)

See Chapter 5 of Web Console User's Guide for troubleshooting (errors and actions during operations on the Web Console PC).

■ If a Web Console user in modify mode is applying the settings by the Apply button, you must wait to log on to the Web Console until the settings are applied. If you wait for five minutes, but still cannot log on to the Web Console, an abnormal end occurs.

■ When you try to drag and drop multiple objects, the drag status might continue to remain even after you release the mouse button. In this case, hold down the same keys such as Shift and Ctrl keys that are used to select the multiple objects, and drop those objects.

## 2.5 Actions to Be Taken According to Result of Troubleshooting

| | Failure | Recovery action | Remarks |
|---|---|---|---|
| 1 | Web Console cannot be connected. | Quit Internet Explorer and restart Web Console after the RMI time-out (default is 1 minute). If the trouble is not solved in spite of it, collect a dump. | |
| 2 | In case of start from the Web Console button on the SVP launcher, the Web Console cannot be started and network error (10,6027) occurred. | A LAN cable may fall out. Please confirm the LAN cable. If the LAN cable falls out, connect it and reboot SVP. | (Note) |
| 3 | Web Console was quit by an operation of the Exit button of Internet Explorer. | Quit Internet Explorer and restart Web Console after the RMI time-out (default is 1 minute). If the trouble is not solved in spite of it, collect a dump. | |
| 4 | After an error message was displayed, all the buttons other than the Exit button became ineffective. | Terminate the process once by pressing the Exit button. Make a recovery from the failure referring to the error code list and restart the client PC. | (Note) |
| 5 | After an error message was displayed, all the buttons excluding the Exit and Refresh buttons became ineffective. | Press the Refresh button after a while and wait until the window becomes normal again. | (Note) |
| 6 | An application error occurred. | Collect a dump and restart Web Console. | |
| 7 | Keys in the Edit box were disabled. (Key entry became unable to be done.) | Quit Web Console by clicking the Exit button with a mouse, restart it, and then execute it. | |
| 8 | The browser was quit forcibly or an internet error occurred. | Restart Web Console. If the trouble is not solved in spite of it, reboot the SVP. | |
| 9 | The microprogram must be newly installed by means of SVP replacement, etc. | Back up the user list, storage list, and environment file beforehand (this can be done through a backup of the Config file) and install the microprogram using the Config file. Then, copy the following files which are subordinate to the c:\dkc200\config to files under the c\programfiles\apachegroup\apache\cgibin\Utility\CSV.<br>• Env.csv<br>• Strlist.csv<br>• Userlist.csv | |
| 10 | In case of network obstacle Java GUI cannot sometimes load the item such as icon and the screen are not in good order. | If the phenomena occurred, Log off from the Web Console, and close all panels including the Storage Device List panel, and then log on to the Web Console again. If the same error occurs, restart the Web Console PC. | |

Note: If the trouble is not solved in spite of it, collect a dump and restart the Web Console PC.

# 3. Difference from the P.P Manual

## 3.1 ShadowImage
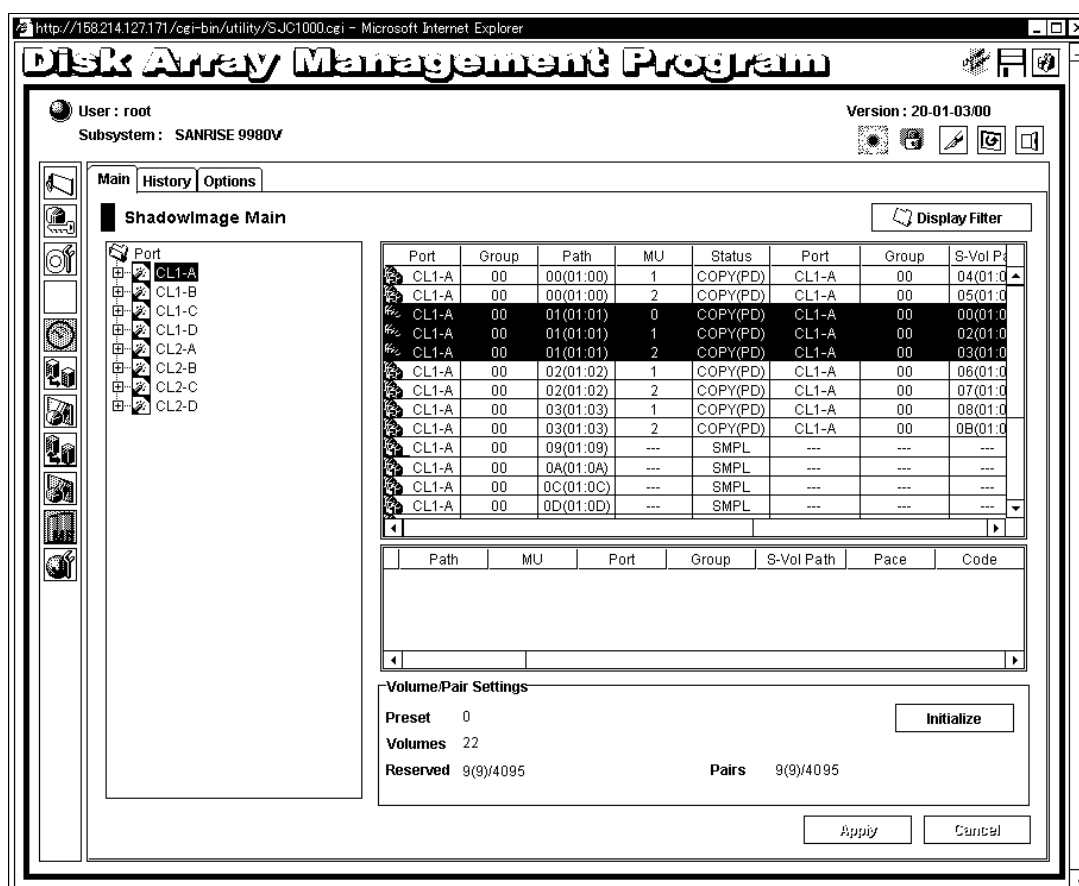


(1) Volume/Pair Settings box

When the ShadowImage window is opened by WebConsole on the SVP, the [Initialize] button is displayed in the Volume/Pair Settings box.

- Initialize

It deletes all the pairs that have been formed by ShadowImage / ShadowImage-Mainframe and sets the pair status of the volume to SMPL (to Simplex, in the case of ShadowImage - Mainframe).

To operate the [Initialize] button, an entry of a password is required. For the password, refer to the Technical Service Center.

Note 1: When the [Initialize] button is pressed, pairs formed by ShadowImage - Mainframe are also deleted.

Note 2: Perform the operation only when it is directed by the Technical Service Center.

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|-------|----------|--|--|--|--|--|

## 3.2 ShadowImage - Mainframe



(1) Volume/Pair Settings box

When the ShadowImage- Mainframe window is opened by WebConsole on the SVP, the [Initialize] button is displayed in the Volume/Pair Settings box.
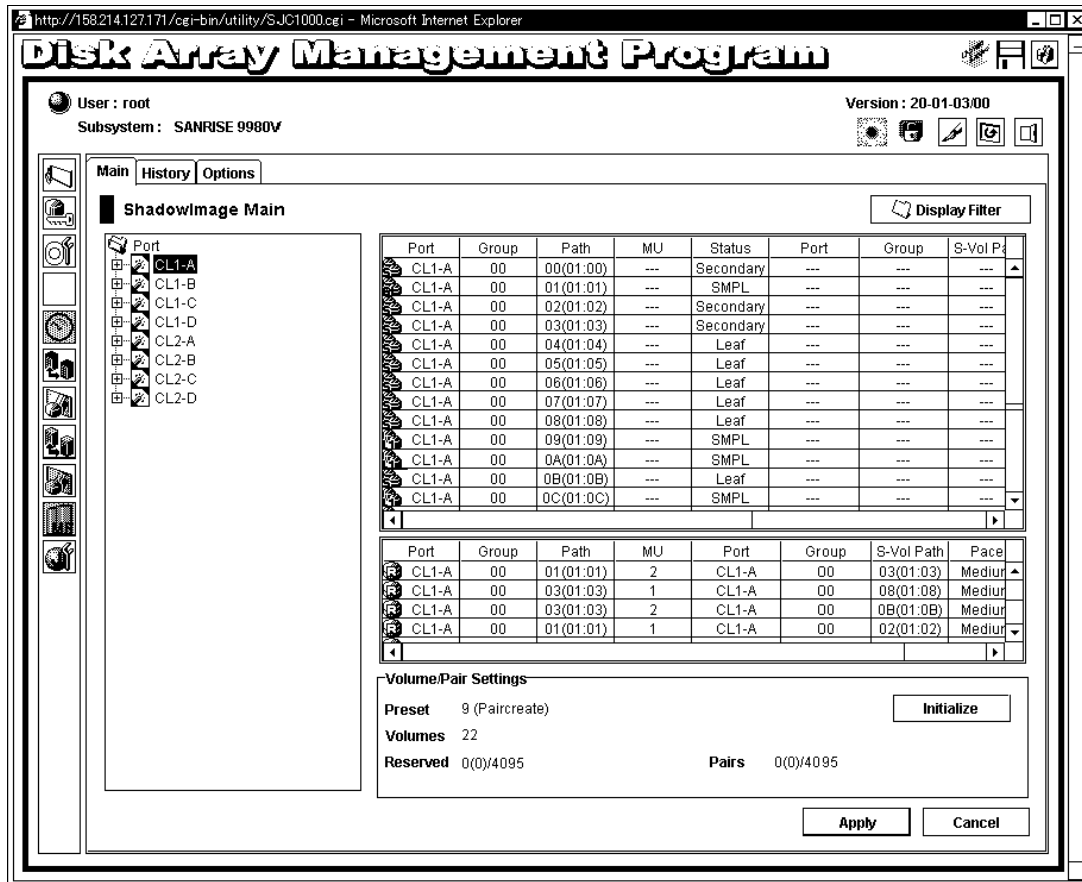
- Initialize

It deletes all the pairs that have been formed by ShadowImage / ShadowImage-Mainframe and sets the pair status of the volume to Simplex (to SMPL, in the case of ShadowImage). To operate the [Initialize] button, an entry of a password is required. For the password, refer to the Technical Service Center.

Note 1: When the [Initialize] button is pressed, pairs formed by ShadowImage are also deleted.
Note 2: Perform the operation only when it is directed by the Technical Service Center.

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## 4. Installing SNMP Agent

4.1 Installation Procedure

1. Install the SNMP API program product. (Refer to SVP04-10)
2. Install options of the SNMP Agent. (Refer to Web Console Web Console User's Guide)
3. Check the setup of the SNMP Agent.

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## 4.2 Operations on SNMP Screen

■ Checking setup

(1) Checking the initiation of the SNMP Agent
   Check that a node of the subsystem has been added to the SNMP manager side. If a node of the subsystem is not yet added, check that the Microsoft's SNMP Agent has been installed correctly.

(2) Checking the support for MIB extensions
   Perform GET/GETNEXT operations of subsystem MIB extensions from the SNMP manager side to a node of the subsystem.  If operations cannot do well, set up once again.

(3) Checking MIB extension report destinations
   The SVP PC has two LAN cards (boards) mounted.  Therefore, check if a correct agent address is reported when issuing a trap, in the following way:
   (a) Select menus [Administrative Tools]-[Services].
   (b) Select "SNMP Service," and then select the Action menu
       or the Restart menu by clicking with the right mouse button
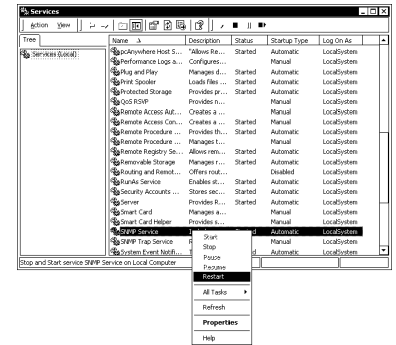
   (c) Check a trap log of SVP ColdStart(0) on the SNMP manager side to see if the agent address has been set to the IP address of the customer's LAN.

### ⚠ CAUTION

If the IP address has been set to the IP address of the LAN only for a DKC, exchange the IP address setting of the LAN board (Card) between the customer's and the DKC's.
(IP address of the customer's LAN → IP address of the LAN only for a DKC,
IP address of the LAN only for a DKC → IP address of the customer's LAN)

■ Uninstalling the SNMP Agent

The following describes a procedure for uninstalling the SNMP Agent.

| Delete set-up data on the SNMP setup screen. |
|---|

↓

| Uninstall the SNMP Agent on the SVP screen.<br>Refer to the user's manual. |
|---|

↓

| Uninstall the SNMP Extensible Agent of Microsoft-make. |
|---|

↓

| Reboot the PC. |
|---|