

# ***EASY MAINTENANCE SECTION***

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# 1. HDD EASY REPLACE

## 1.1 How to operate the SVP (PC)

### 1.1.1 How to use Windows

(1) <Notation>

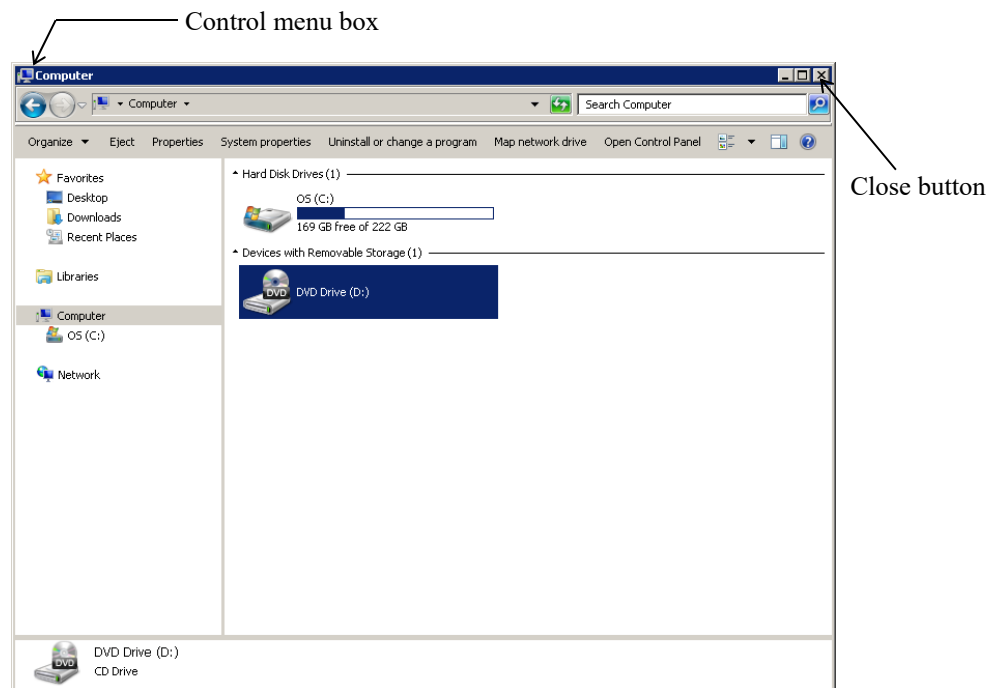
In this manual, “select” has the following meaning, and “(CL)”, “(DC)”, or “(DR)” is added to the word for each meaning.

- (CL) Click : Quickly press and release the left side button of mouse.  
(DC) Double-click : Click the left side button of mouse twice in rapid succession.  
(DR) Drag : To hold down the left side button of mouse while you trace the mouse to move the pointer to a desired position. Then release the button.

(2) <Close>

“Close” means to close the application window.

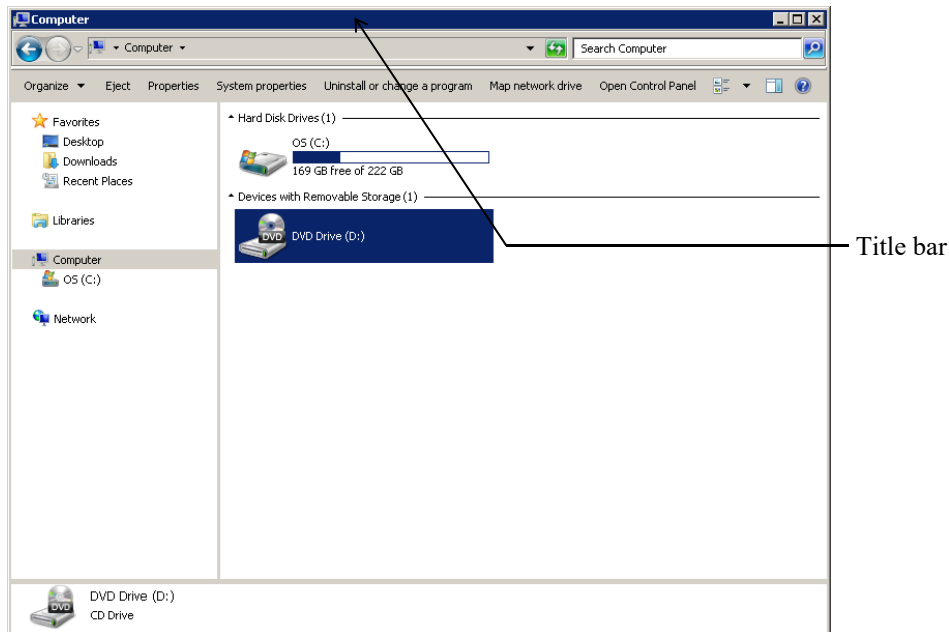
(Double-click the control menu box of the window or click the close button for window.)



(3) <Moving the Window>

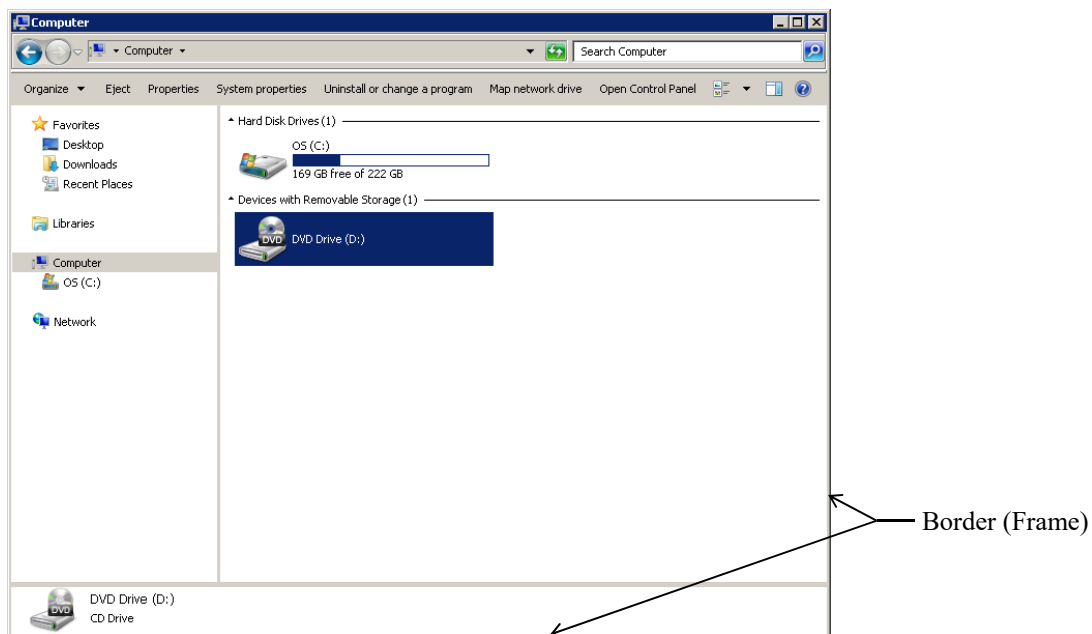
Move the pointer to the title bar with the mouse.

While pressing the button, move the window with the mouse or touchpad (DR) to a desired position and release the button.



(4) <Changing the window size>

Move the pointer to the window border (frame) (the pointer changes to the double-headed arrow). While pressing the button, move the border (the border changes to the broken line) until the window becomes a desired size, and release the button.



- (5) <Switching the screen (when two or more screens are opened)>  
While pressing the [Alt] key, press [Tab] key (or [Esc] key) until your desired window title is displayed, and release the [Alt] key.

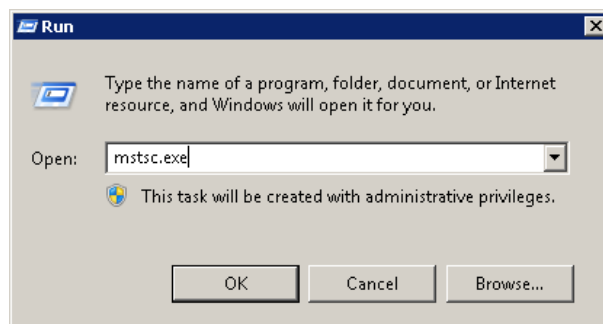
## 1.1.2 Connecting the PC to the SVP

In order to connect to SVP (PC), execute remote desktop connection and perform the following procedures from a Maintenance PC.

### 1.1.2.1 Connection to the SVP

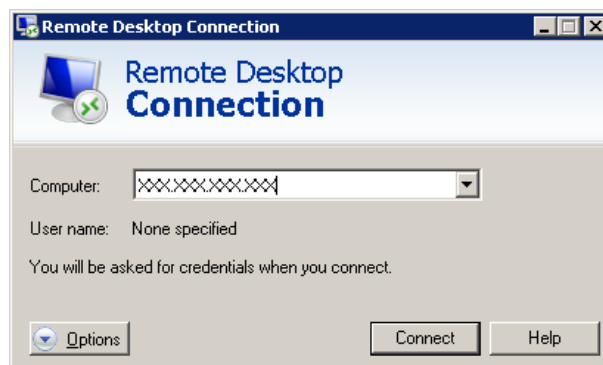
- (1) <Performing remote desktop connection>

Select (CL) [Start]-[Windows System]-[Run].  
Enter “mstsc.exe” in the “Open” box, and  
select (CL) the [OK] button.



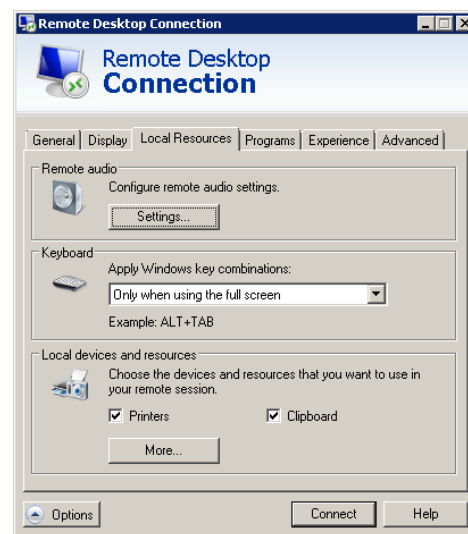
- (2) <Performing the connection>

Enter IP address or host name of the SVP  
(PC), and select (CL) the [Connect] button.

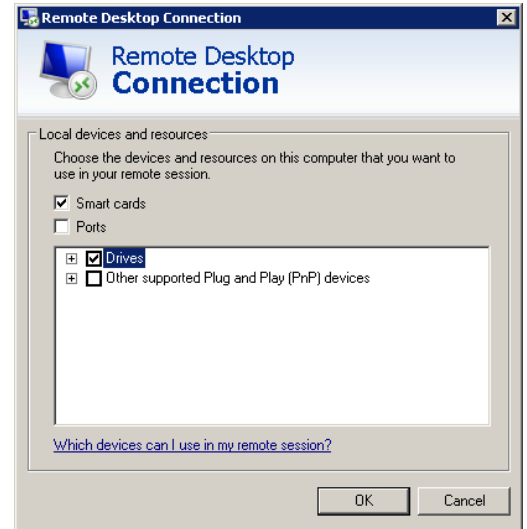


NOTE: Please check that automatic connection of a local disk drive is setup in the case of connection. Confirmation procedure is as follows.

- (a) Select (CL) the [Options] button.
- (b) Select (CL) the “Local Resources” tab in the ‘Remote Desktop Connection’ window.
- (c) Select (CL) the [More...] button in the “Local Resources” tab.

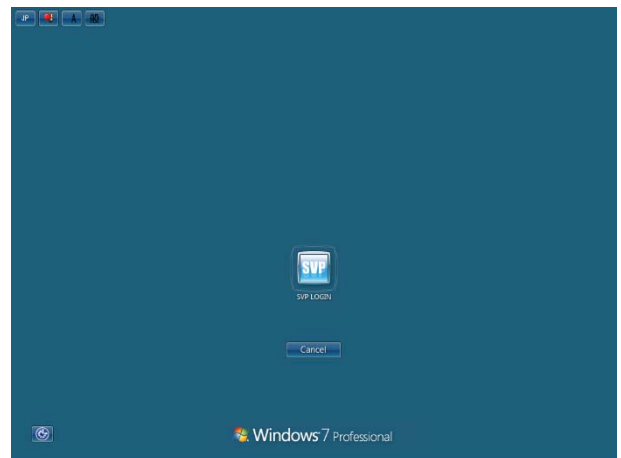


(d) Confirm that the “Drives” is checked.

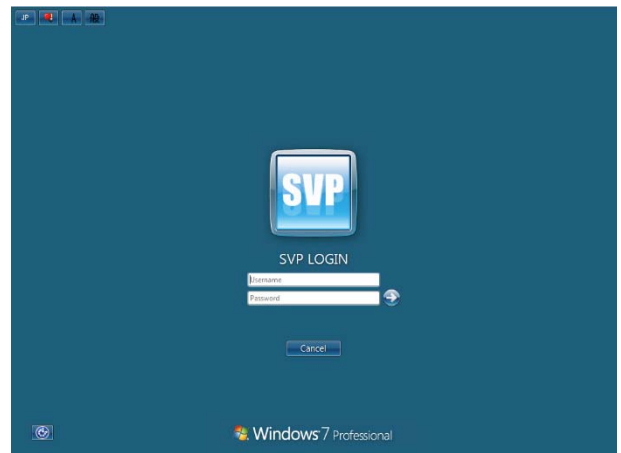


(3) <Performing logon>

Select (CL) SVP icon displayed in the middle of the window, and a window appears to enter user name and password.



Enter user name and password and click the [→] button to logon to the SVP (PC).



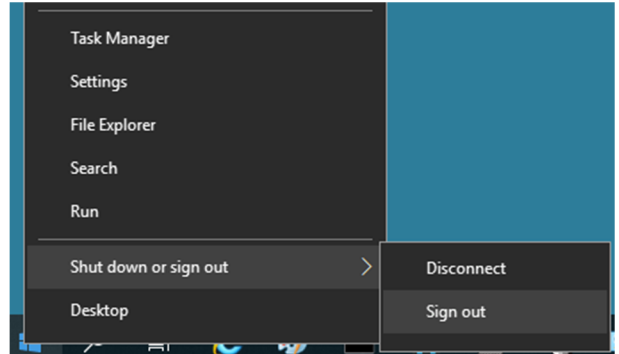
### 1.1.3 Disconnecting the SVP

Disconnect the Maintenance PC from the SVP.

(1) Log off the SVP

Right-click [Start], and then select (CL) [Shut down or sign out]-[Sign out].

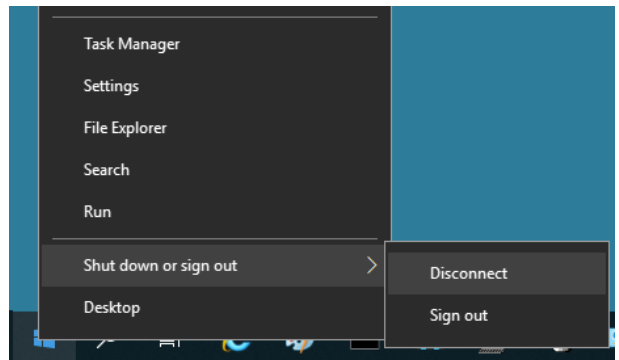
The SVP window in the Maintenance PC is closed.



(2) Disconnect the SVP

Right-click [Start], and then select (CL) [Shut down or sign out]-[Disconnect].

The SVP window in the Maintenance PC is closed.



## 1.2 HDD Easy Replacement function

- NOTICE:**
- Before performing HDD easy replacement, complete all the following operations, and confirm that there is no running task and no task waiting to be performed.
    - All Storage Navigator
    - Web Console
    - Raid Manager
    - Tool
  - After confirming the above, wait for 10 minutes or more before starting HDD easy replacement.
  - If you cannot confirm “the completion of HDD replacement” after 25 minutes or more have passed since the HDD replacement, check Shut Down LED (Red) of the HDD.  
For how to confirm “the completion of HDD replacement”, see “1.2.1 (5) Step6: Confirming the completion of replacement”.
  - When Shut Down LED (Red) of HDD is lit, perform HDD easy replacement again or contact the support center to ask for instructions.
  - When Shut Down LED (Red) of HDD is not lit, contact the support center to ask for instructions.

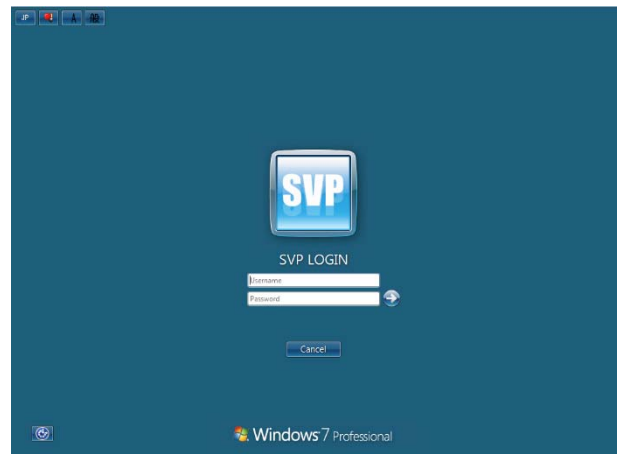
### 1.2.1 Procedure for HDD easy replacement

#### (1) <Connection to the SVP>

Connect to SVP using remote desktop connection from a Maintenance PC.

For details, see “1.1.2 Connecting the PC to the SVP”.

Enter user name and password of user maintenance personnel account, and select (CL) the [→] button.



**EASYMNT01-80**

- (2) <Starting a window>  
When login to SVP, Web Console automatically starts up.

- (3) <Open [Drives] tab>  
Select Parity Groups in Explorer of Web Console.



- (4) <Display of [Drives] tab>  
Click [Drives] tab.

The screenshot shows the 'Parity Groups' web console with the 'Drives' tab selected (highlighted with a red box). The table below displays the drive configuration for a parity group.

Parity Group ID	Drive Box	Location	Status	Drive Type/RPM/Capacity	Drive Type-Code	Usage
1-1	D8-00	HDD00-00	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-1	D8-00	HDD00-01	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-1	D8-00	HDD00-02	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-1	D8-00	HDD00-03	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-1	D8-00	HDD00-04	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-1	D8-00	HDD00-05	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-1	D8-00	HDD00-06	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-1	D8-00	HDD00-07	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-1	D8-00	HDD00-08	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-1	D8-00	HDD00-09	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-1	D8-00	HDD00-10	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-1	D8-00	HDD00-11	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-1	D8-00	HDD00-12	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-1	D8-00	HDD00-13	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-1	D8-00	HDD00-14	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-1	D8-00	HDD00-15	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data

- (5) <Confirming replace steps>  
Perform the replacement work of Step1 to Step7.

**NOTICE:** (1) Before starting the operation, each worker must wear a wrist strap on his/her wrist to prevent IC and LSI on the package from static electricity. For information on how to wear a wrist strap, see “1.3.1 Attaching the Wrist Strap”.

(2) Do not give an impact or vibration on HDD as it is precision part.

<Step1: Confirming the HDD to be replaced>

See the [Drives] tab in the Web Console window to check the HDD to be replaced.

Status: Failed

□□

Parity Group ID	Drive Box	Location	Status	Drive Type/RPM/Capacity	Drive Type-Code	Usage
1-1	DB-00	HDD00-00	Failed	SAS/10krpm/600GB	DKR5D-J60...	Data
1-1	DB-00	HDD00-01	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-1	DB-00	HDD00-02	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-1	DB-00	HDD00-03	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-2	DB-00	HDD00-04	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-2	DB-00	HDD00-05	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-2	DB-00	HDD00-06	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-2	DB-00	HDD00-07	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-3	DB-00	HDD00-08	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-3	DB-00	HDD00-09	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-3	DB-00	HDD00-10	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-3	DB-00	HDD00-11	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
2-1	DB-00	HDD00-12	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
2-1	DB-00	HDD00-13	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
2-1	DB-00	HDD00-14	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
2-1	DB-00	HDD00-15	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data

---

**<Step2: Removing Bezel>**

□□

For how to remove the front bezel, see “1.3.2 Bezel Opening-Closing Procedure”.

---

**<Step3: Confirming LED>**

□□

Confirm that a LED of the HDD to be replaced is lighting up red and the LED is not blinking in green.

For information how to confirm LED, see “1.3.3 Procedure to confirm Shut Down LED”.

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**<Step4: Removing HDD>**

□□

Remove a HDD.

For information how to remove HDD, see “1.3.4 Procedure to Replace HDD”.

Confirm that a LED of the removed HDD is turned off.

For information how to confirm LED, see “1.3.3 Procedure to confirm Shut Down LED”.

NOTE: It may take about 10 seconds for LED to be turned off after removing the HDD.

---

**<Step5: Inserting HDD>**

□□

Insert new HDD in a place where an HDD has been removed.

For procedure to insert HDD, see “1.3.4 Procedure to Replace HDD”.

<Step6: Confirming the completion of replacement>

□□

See the [Drives] tab of Web Console window to check the status of the replaced HDD.

Status: Normal

Parity Group ID	Drive Box	Location	Status	Drive Type/RPM/Capacity	Drive Type-Code	Usage
1-1	D8-00	HDD00-00	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-1	D8-00	HDD00-01	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-1	D8-00	HDD00-02	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-1	D8-00	HDD00-03	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-1	D8-00	HDD00-04	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-2	D8-00	HDD00-05	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-2	D8-00	HDD00-06	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-2	D8-00	HDD00-07	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-2	D8-00	HDD00-08	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-2	D8-00	HDD00-09	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-3	D8-00	HDD00-10	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-3	D8-00	HDD00-11	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-3	D8-00	HDD00-12	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-3	D8-00	HDD00-13	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-3	D8-00	HDD00-14	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data
1-3	D8-00	HDD00-15	Normal	SAS/10krpm/600GB	DKR5D-J60...	Data

If the status is not normal, refresh again after a few minutes to make sure the status is normal.

<Step7: Post-processing of replacement>

□□

For how to install the front bezel, see “1.3.2 Bezel Opening-Closing Procedure”.

## (6) &lt;Confirming the completion&gt;

Confirm that from the [Step1] to the [Step7] are checked. If any of steps are not checked, perform all steps from “<Step1: Confirming the HDD to be replaced>” again.

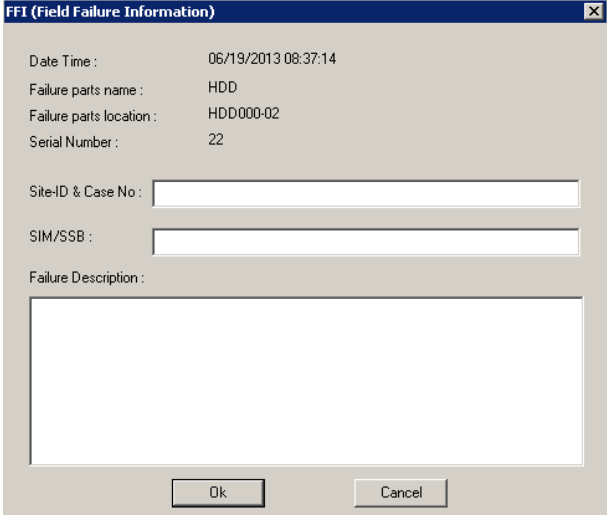
## (7) &lt;Collect DUMP&gt;

Log information can be collected in accordance with the following procedure.

**NOTICE:** The log information to be collected by this step is essential to investigate hardware failures.

Select (CL) the [Ok] button on the ‘FFI’ window without entering anything.

NOTE: If the ‘FFI’ window is not displayed, hold down the [Alt] and the [Tab] key until the window is displayed.



FFI (Field Failure Information)

Date Time : 06/19/2013 08:37:14  
Failure parts name : HDD  
Failure parts location : HDD000-02  
Serial Number : 22

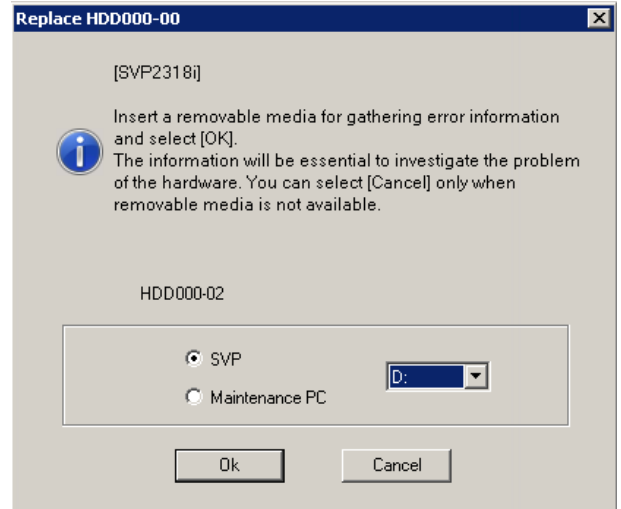
Site-ID & Case No :   
SIM/SSB :

Failure Description :

Ok Cancel

“Insert a removable media for gathering error information and select [OK]. The information will be essential to investigate the problem of the hardware. You can select [Cancel] only when removable media is not available.” is displayed.

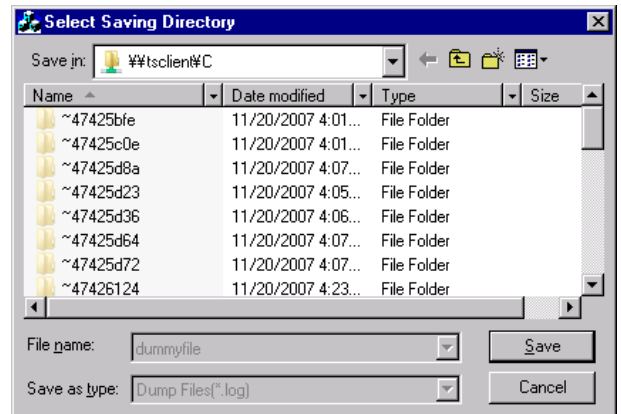
Select a Maintenance PC arbitrary drive, and select (CL) [Ok].



When Maintenance PC is selected, the directory selection dialog is displayed. Please select an arbitrary directory if necessary.

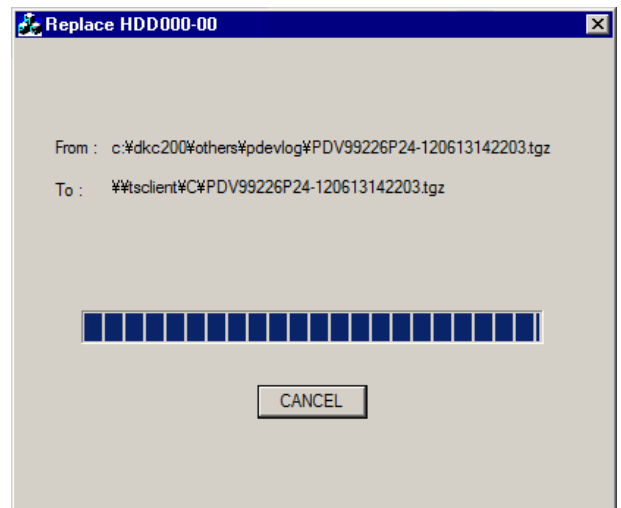
Select (CL) [Save] when saving a file in a specified directory.

It returns to the drive selection screen when [Cancel] is selected (CL).

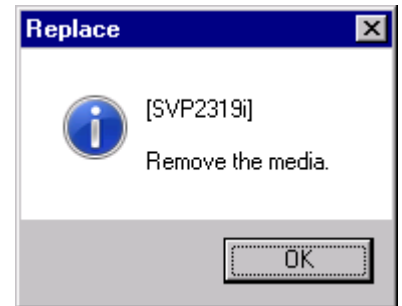


<Copy of the error information>

The error information is copied onto media.



“Remove the media.” is displayed.  
Select (CL) [OK].



- (8) <Post-processing>  
Select (CL) the [Exit] button on the ‘SVP’ window to close the window.

## 1.2.2 Action when any error or failure occurs

If a warning, a failure, or other error status is displayed on screen, contact the support center to ask for instructions.

## 1.3 Hardware operations

### 1.3.1 Attaching the Wrist Strap

- In order to protect parts from the electrostatic discharge, every worker must put a wrist strap on his/her wrist before starting installation or maintenance work and start the work after connecting the grounding clip to a metallic portion of the frame. (The wrist strap must be put on when connecting the LAN, RS232C or channel interface cable.)
- When handling a part, hold it in the way that fingertips of the hand putting the wrist strap on touch a metallic portion of the part.  
(The above is necessary in order to discharge the charged static electricity and prevent a charge caused by handling.)
- Be sure to keep the wrist strap close to the storage system.
- Be sure to touch the storage system with the wrist strap put on. If you touch the storage system without putting on the wrist strap, the static electricity charged on your body flows to the storage system in an instant because no resistance exists between your body and the storage system causing a storage system trouble.
- Wear a wrist strap until the work is finished when working with the door of device or the bezel open (for change of channel interface cable connection etc.).

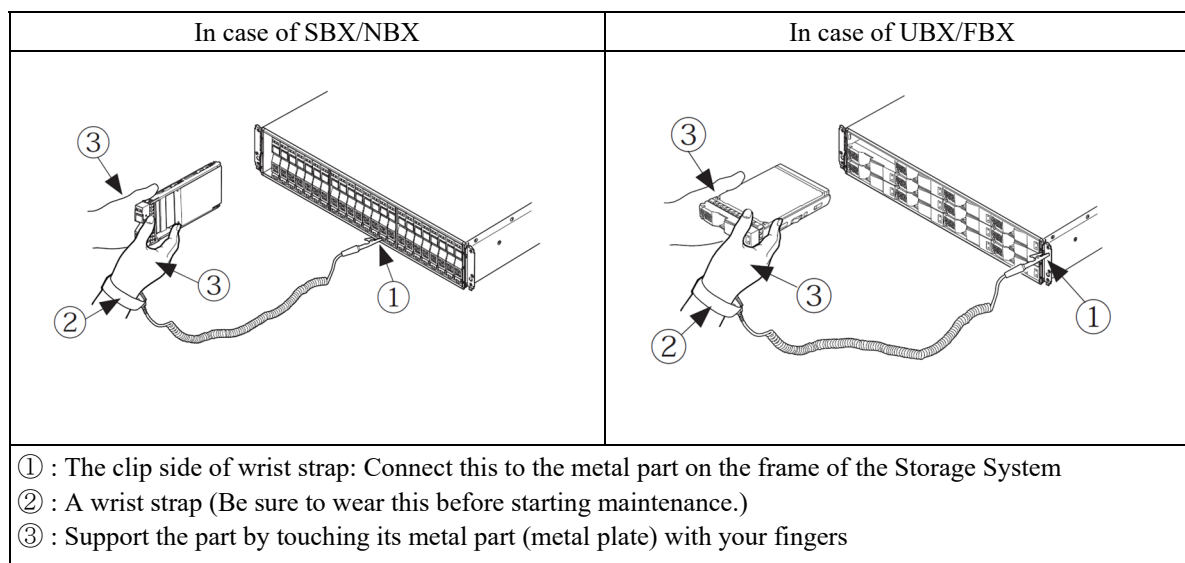


Fig. 1.3.1-1 Attachment of Wrist Strap

### 1.3.2 How to Attach/Remove the Front Bezel

 **CAUTION**

Attach or remove the Front Bezel carefully following the procedure. Otherwise, you may hurt your fingers by pinching them.

- NOTICE:**
- To prevent part failures caused by static electrical charge built up on your ownbody, be sure to wear a wrist strap connected to the Storage System before starting and do not take it off until you finish.
  - The Front Bezels of SBX/UBX/FBX/NBX, DKC and HSNBX are different in size.
  - When installing or removing the Front Bezel, try not to operate the main switch incorrectly with the hook or the ON/OFF button of the Front Bezel.

## 1. In Case of SBX/UBX/FBX/NBX

A key is necessary to attach or remove a Front Bezel.

### Procedure for removal

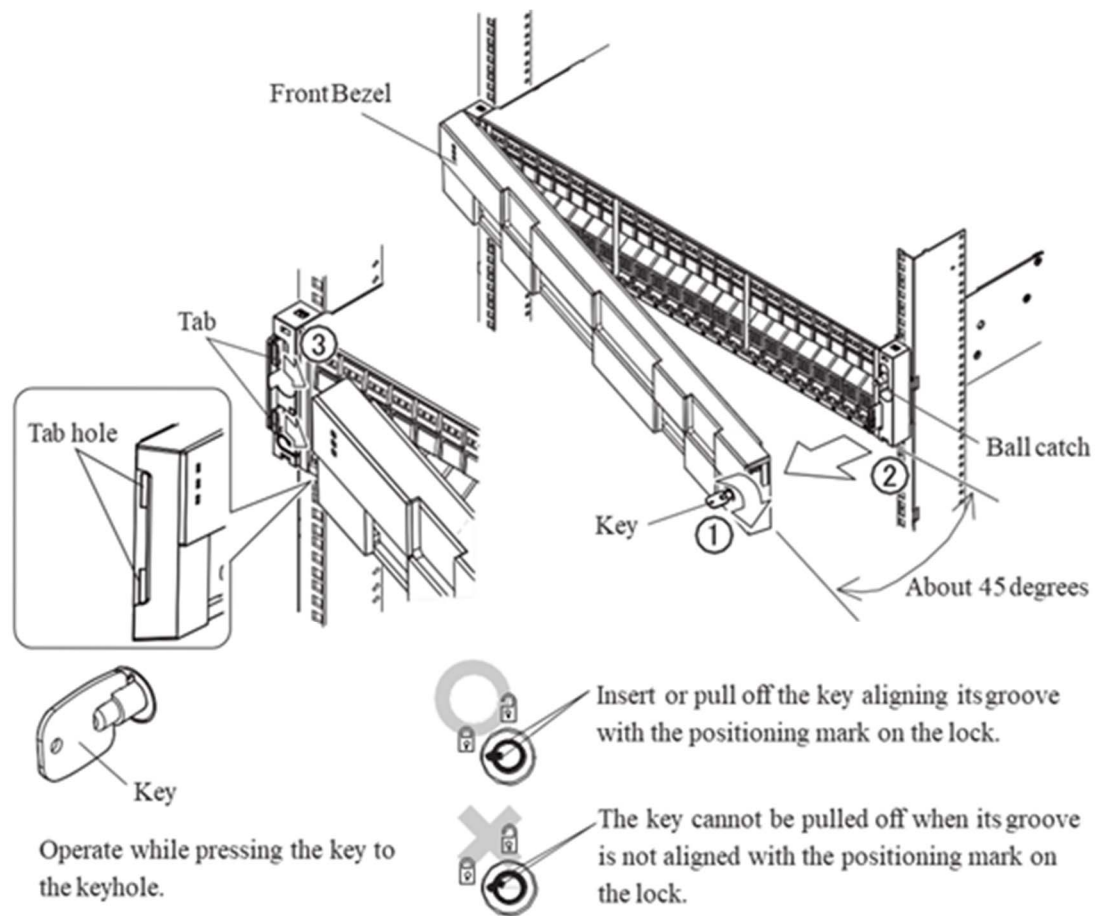
- (1) Insert the key into the keyhole on the Front Bezel and release the Lock of the Front Bezel (①).
- (2) Pull the key toward you while holding the lower right portion of the Front Bezel, and then remove the right side of the Front Bezel from the ball catch (②).

NOTE: When removing the Front Bezel, work with the opening angle between the Front Bezel and the Storage System of up to 45 degrees.

Do not force the Front Bezel open too wide. Otherwise, a damage of Front Bezel may be caused.

- (3) Remove the Front Bezel from the left tabs while pulling, and then remove it (③).

NOTE: When removing Front Bezel, don't push left side of Front Bezel.

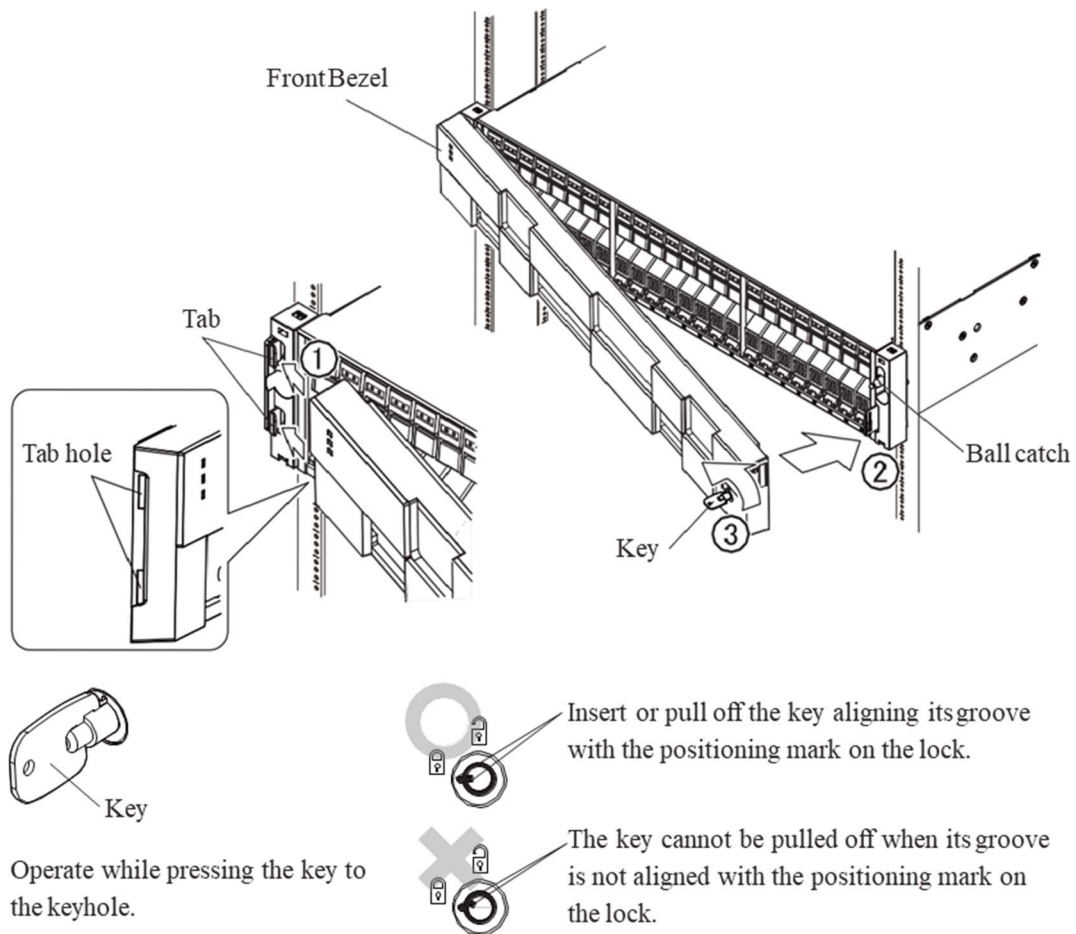


- NOTE:
- When inserting and turning the key, have it inserted completely. If you turn the key while pulling it towards you, a damage of it may be caused.
  - When removing the key after locking up the Front Bezel, pull it off aligning its groove with the positioning mark on the lock. When the key is pulled off in the state where its groove is not aligned with the positioning mark on the lock, a damage of the lock may be caused

Fig. 1.3.2-1 Procedure for Removing Front Bezel

### Procedure for attachment

- (1) Unlock the Front Bezel with the key, and hold the key and bottom of Front Bezel with your both hands.
- (2) Insert the tabs on the left front side of the chassis into the tab holes on the bezel (①).  
NOTE: When inserting Front Bezel, don't push left side of Front Bezel.
- (3) Fix the Front Bezel by pressing the right side of the Front Bezel to engage it with the ball catch on the front side of the Storage System (②).
- NOTE: When fixing Front Bezel, don't push left side of Front Bezel.
- (4) Lock the Front Bezel with the key (③).



- NOTE:
- When inserting and turning the key, have it inserted completely. If you turn the key while pulling it towards you, a damage of it may be caused.
  - When removing the key after locking up the Front Bezel, pull it off aligning its groove with the positioning mark on the lock.  
When the key is pulled off in the state where its groove is not aligned with the positioning mark on the lock, a damage of the lock may be caused

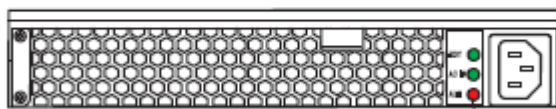
Fig. 1.3.2-2 Procedure for Attaching Front Bezel

### 1.3.3 Checking the Drive Box LEDs

Check that the ALM LED (red) on the DBPS installed in the Drive Box to be removed lights up.



Rear view of SBX/UBX



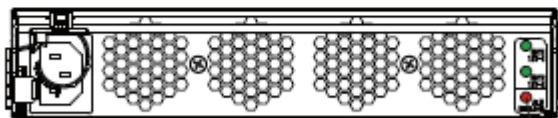
ALM LED (red)

DBPS

Fig. 1.3.3-1 ALM LED on DBPS (SBX/UBX)



Rear view of FBX



ALM LED (red)

DBPS

Fig. 1.3.3-2 ALM LED on DBPS (FBX)

## 1.3.4 Removing Drives

### 1.3.4.1 Removing Work Drives

#### 1.3.4.1.1 Removing Drives for SBX/NBX

Pull the stopper of the handle toward you to unlock (①), open the handle, and then remove the Drive by pulling it out taking care not to apply a shock to it.

When using the removed Drive for the purpose of addition to another Storage System, keep it in custody with its handle returned to its original state (locked by the stopper) taking care not to apply a shock to it.

NOTE: Since the HDD is a precision component, handle it very carefully not to apply a vibration or shock to it.

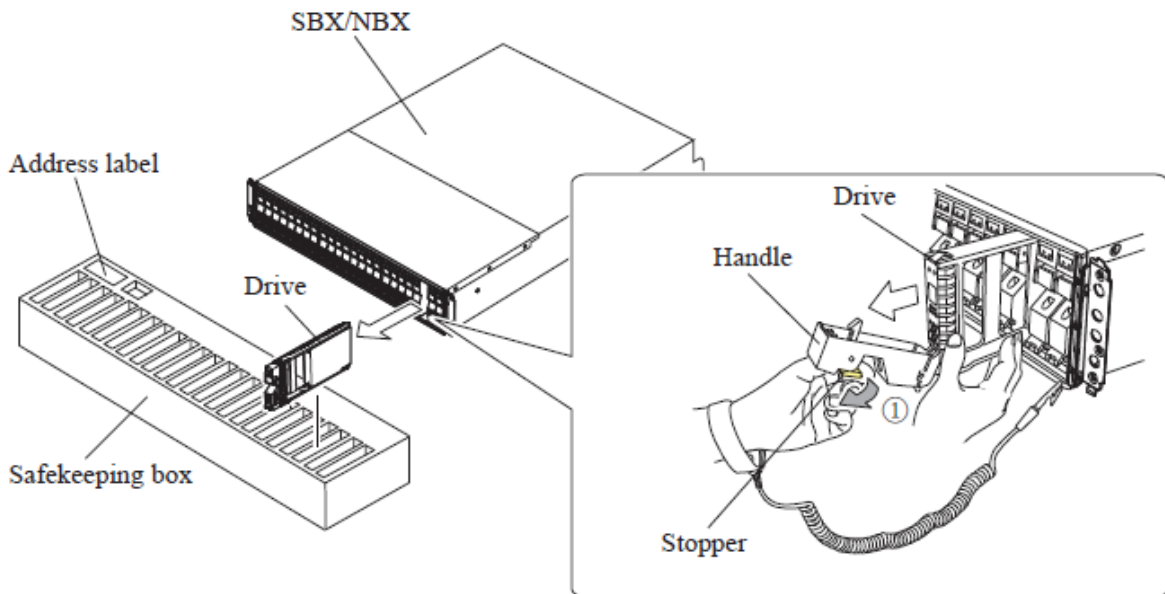


Fig. 1.3.4-1 Removing the Drive (SBX/NBX)

### 1.3.4.1.2 Removing Drives for UBX

NOTE: When handling the Drive, hold the RAIL side because the SHIELD SPRING is subject to breakage.

Pull the stopper of the handle toward you to have the lock off, and then remove the Drive by pulling it out taking care not to apply a shock to it.

When using the removed Drive for the purpose of addition to another Storage System, keep it in custody with its handle returned to its original state (locked by the stopper) taking care not to apply a shock to it.

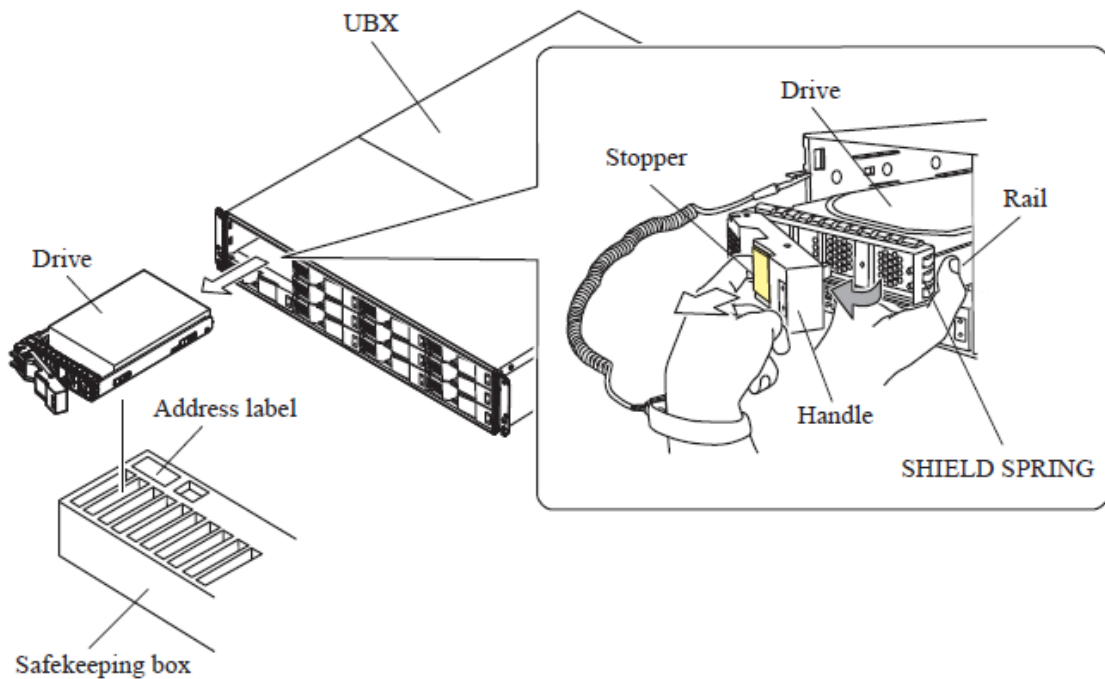


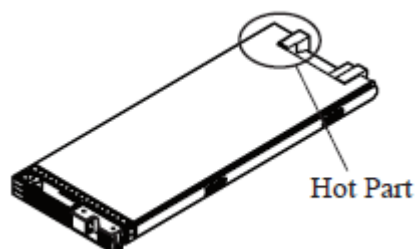
Fig. 1.3.4-1 Removing the Drive (UBX)

## 1.3.4.1.3 Removing Drives for FBX

**CAUTION**

Be careful of a hot part:

A Flash Module Drive that has been just removed from the system in operation has a hot part on its side surface. Be careful not to touch the hot part.



**NOTICE:** Be sure to read “Notes when Handling the Flash Module Drive (FMD)” (INST(GE)01-01-60) before handling the FMD and perform the procedure following the notes.

**NOTICE:** Since the HDD is a precision component, handle it very carefully not to apply a vibration or shock to it.

NOTE: When handling the drive, hold the rail side because the shield spring is subject to breakage.

Pull the stopper of the handle toward you to unlock, open the handle, and then remove the Drive by pulling it out taking care not to apply a shock to it.

When using the removed Drive for the purpose of addition to another Storage System, keep it with its handle returned to its original state (locked by the stopper) taking care not to apply a shock to it.

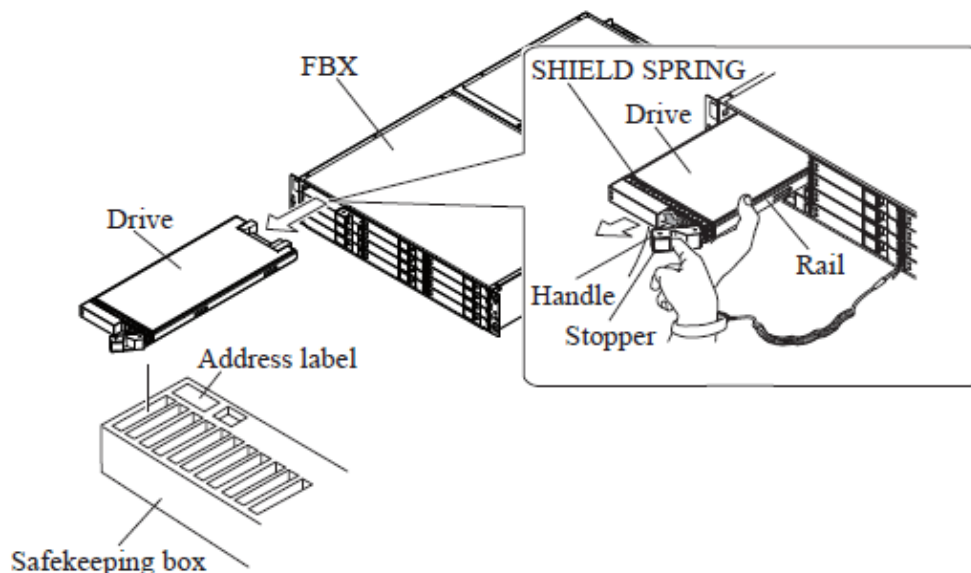


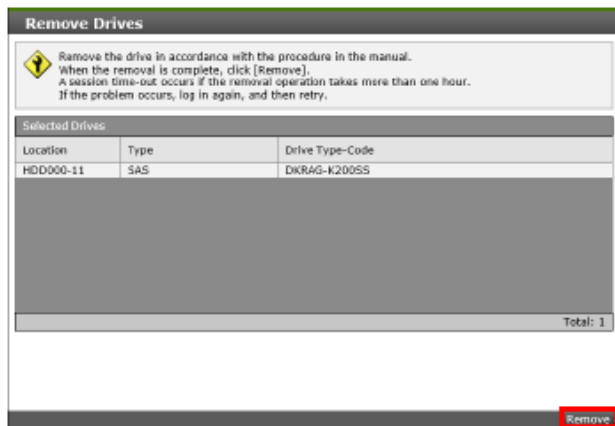
Fig. 1.3.4-3 Removing the Drive (FBX)

### 1.3.4.2 Checking the Drive Removal by Maintenance Utility

#### (1) <Drive Removal Preparation Completion Window>

Click [Remove].

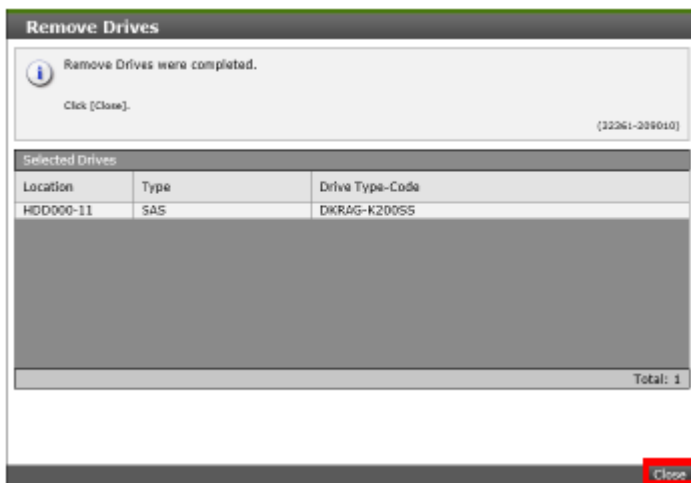
NOTE: The error list window is displayed if multiple errors are detected by the prior check. If it is displayed, click the text of “Error Code” and recover the failures or the blockade in accordance with the details of the displayed errors.



#### (2) <Drive Removal Completion Window>

Check that the following message is displayed and click [Close].

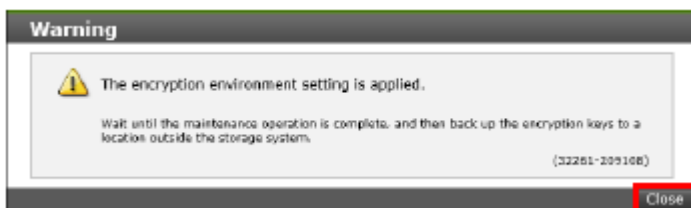
If a message other than the described is displayed, refer to Message Section ([MSG00-00](#)).



#### (3) <Check back up the encryption key Messages>

When the encryption environment is applied, the following message is displayed.

Check the message and click [Close].



### 1.3.4.3 Adding Work of Drives

**NOTICE:** Back Board, or drive connector or drive handle may be damaged when the drive is forcibly inserted.

If the drive cannot be easily inserted until the claws on the handle reach the DKU, or if the handle binds or stops before it can be locked, then remove the drive and perform inspection:

- a) Check the drive slot in DKU to be free and clear of obstructions.
- b) Check connector on back board for visible defects.
- c) Inspect connector on drive for visible defects.
- d) Inspect drive top and bottom guide for defects. Note special alignment tab on bottom guide on some drive. A damaged tab can bind on the lower slot guides in DKU.
- e) During installation make sure the drive is inserted in alignment with slot guides.
- f) Check upper rear spring on SSD has been removed. (This applies only on SSD)

Reinsert drive after inspections have passed.

### 1.3.4.3.1 Adding Drives for SBX/NBX

**NOTICE:** Since the Drive is a precision component, handle it very carefully not to apply a vibration or shock to it.

- (1) Fit the Drive in the guide rail and slide it in the direction shown by the arrow not to give a shock.
- (2) Push the Drive in until it reaches the position where a hook of the handle can be entered into the square hole at the lower part of a frame on the front side of the Drive Box.
- (3) Close the opened stopper, and then press the stopper to lock.

**NOTE:** If the handle is closed in the state in which its hook cannot be entered into the square hole, the Drive cannot be installed correctly because it runs into the frame of the Storage System.

- (4) Pull the handle lightly to make sure that the Drive cannot be pulled out.

**NOTE:** At this time, ACT LED (green) of the drive may slightly light. However it is acceptable.

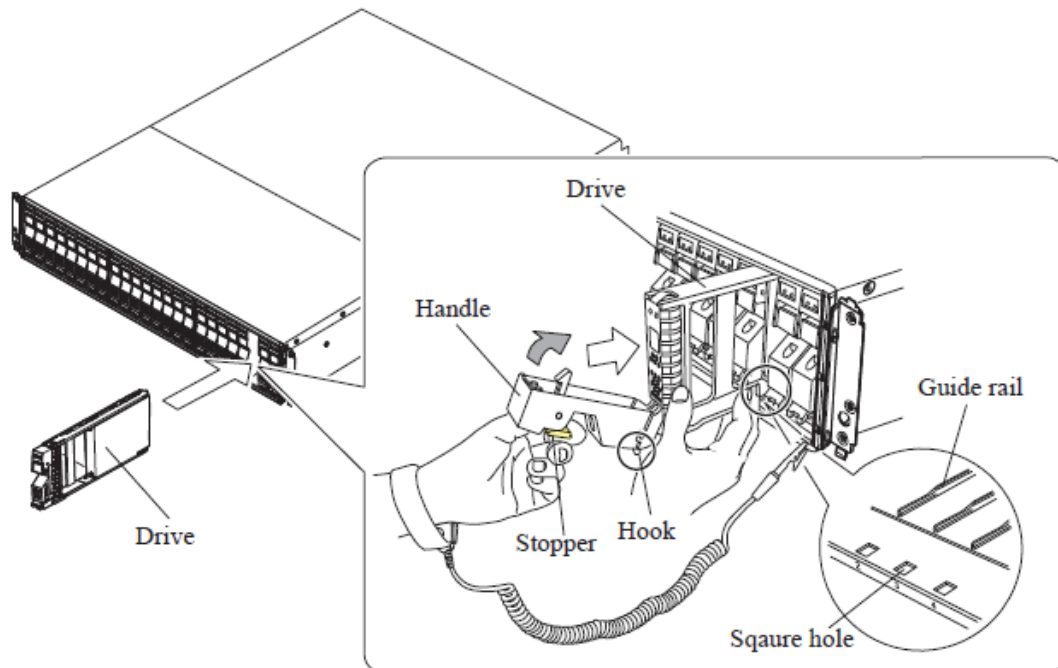


Fig. 1.3.4-4 Installing the Drive (SBX/NBX)

## 1.3.4.3.2 Adding Drives for UBX

**NOTICE:** Since the Drive is a precision component, handle it very carefully not to apply a vibration or shock to it.

NOTE: When handling the Drive, hold the rail side because the SHIELD SPRING is subject to breakage.

- (1) Open the handle fully, fit the Drive in the guide rail and slide it in the direction shown by the arrow not to give a shock.
- (2) Push it in until it reaches the position where a hook of the handle can be entered into the square hole on the frame.
- (3) Pull the stopper lightly and close the handle, and then have the lock on by pressing the stopper.

NOTE: If the handle is closed in the state in which its hook cannot be entered into the square hole, the Drive cannot be installed correctly because it runs into the frame of the Storage System.

- (4) Pull the handle lightly to make sure that the Drive cannot be pulled out.

NOTE: At this time, ACT LED (green) of the drive may slightly light. However it is acceptable.

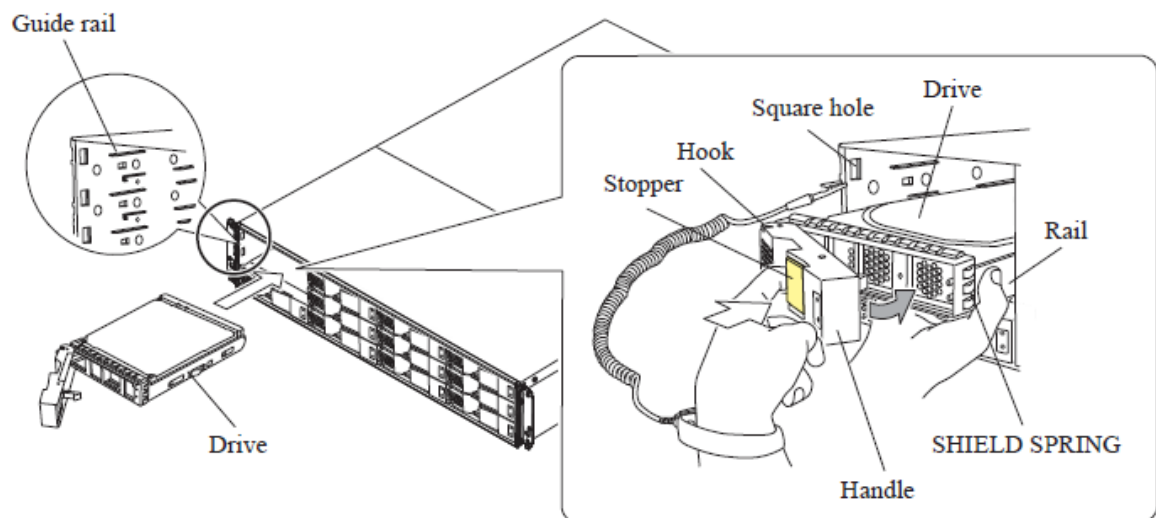


Fig. 1.3.4-5 Installing the Drive (UBX)

## 1.3.4.3.3 Adding Drives for FBX

**NOTICE:** Be sure to read “Notes when Handling the Flash Module Drive (FMD)” ([INST\(GE\)01-01-60](#)) before handling the FMD and perform the procedure following the notes.

**NOTICE:** Since the HDD is a precision component, handle it very carefully not to apply a vibration or shock to it.

NOTE: When handling the drive, hold the rail side because the shield spring is subject to breakage.

- (1) Open the handle fully, fit the Drive in the guide rail and slide it in the direction shown by the arrow not to give a shock.
- (2) Push the Drive in until it reaches the position where a hook of the handle can be entered into the square hole at the lower part of a frame on the front side of the Drive Box.
- (3) Close the opened stopper, and then press the stopper to lock.

NOTE: If the handle is closed in the state in which its hook cannot be entered into the square hole, the Drive cannot be installed correctly because it runs into the frame of the Storage System.

- (4) Pull the handle lightly to make sure that the Drive cannot be pulled out.

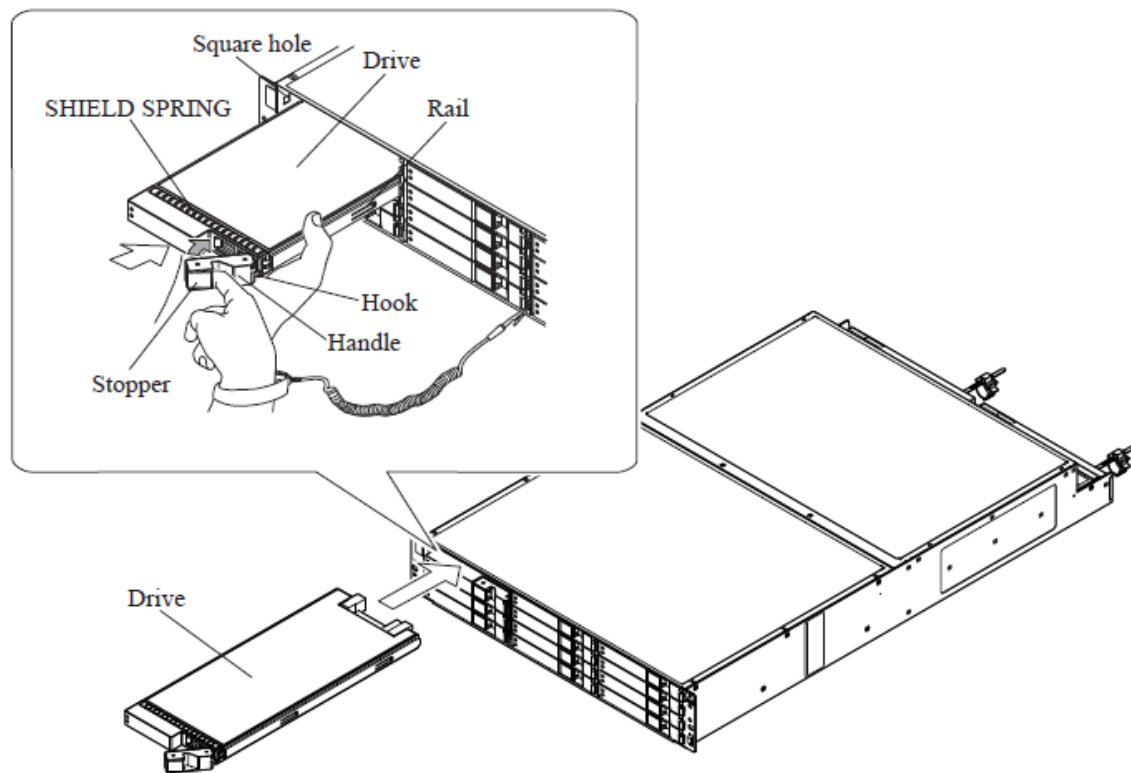


Fig. 1.3.4-6 Installing the Drive (FBX)

## 2. Reset Microprocessor

### 2.1 How to operate the SVP (PC)

#### 2.1.1 How to use Windows

(1) <Notation>

In this manual, “select” has the following meaning, and “(CL)”, “(DC)”, or “(DR)” is added to the word for each meaning.

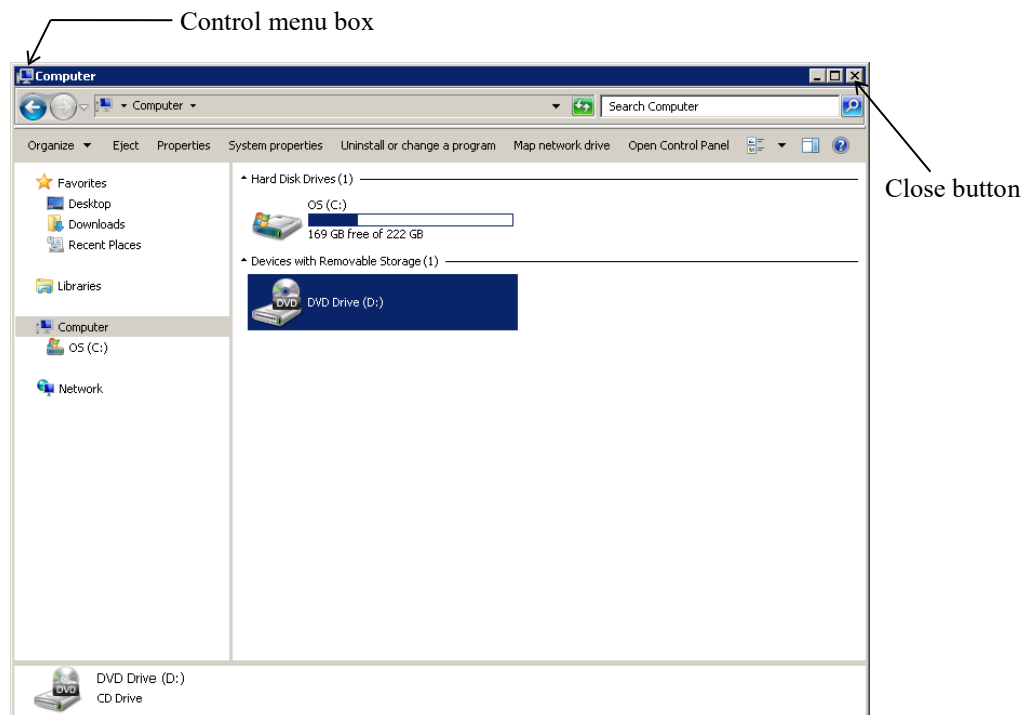
- (CL) Click : Quickly press and release the left side button of mouse.  
(DC) Double-click : Click the left side button of mouse twice in rapid succession.  
(DR) Drag : To hold down the left side button of mouse while you trace the mouse to move the pointer to a desired position. Then release the button.

---

(2) <Close>

“Close” means to close the application window.

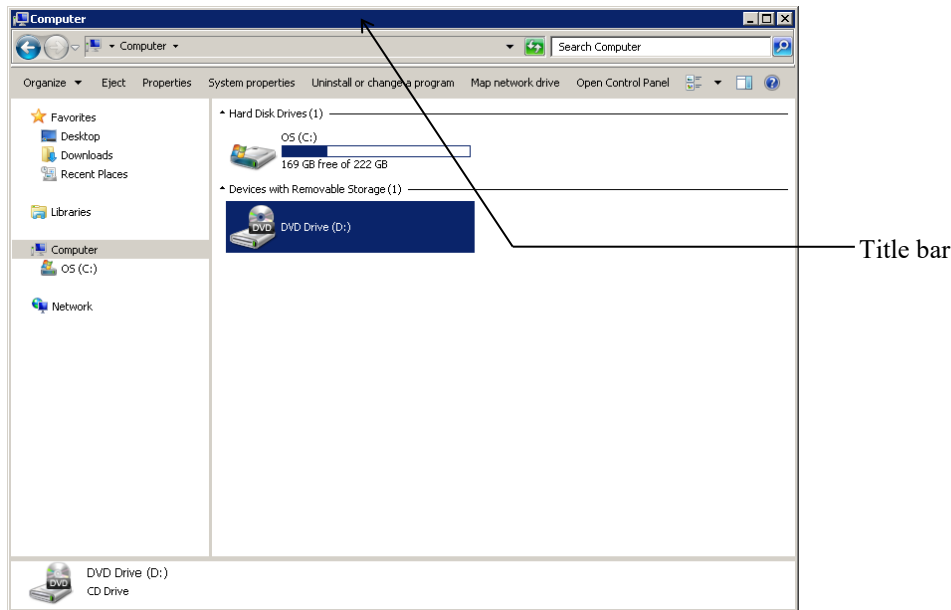
(Double-click the control menu box of the window or click the close button for window.)



(3) <Moving the Window>

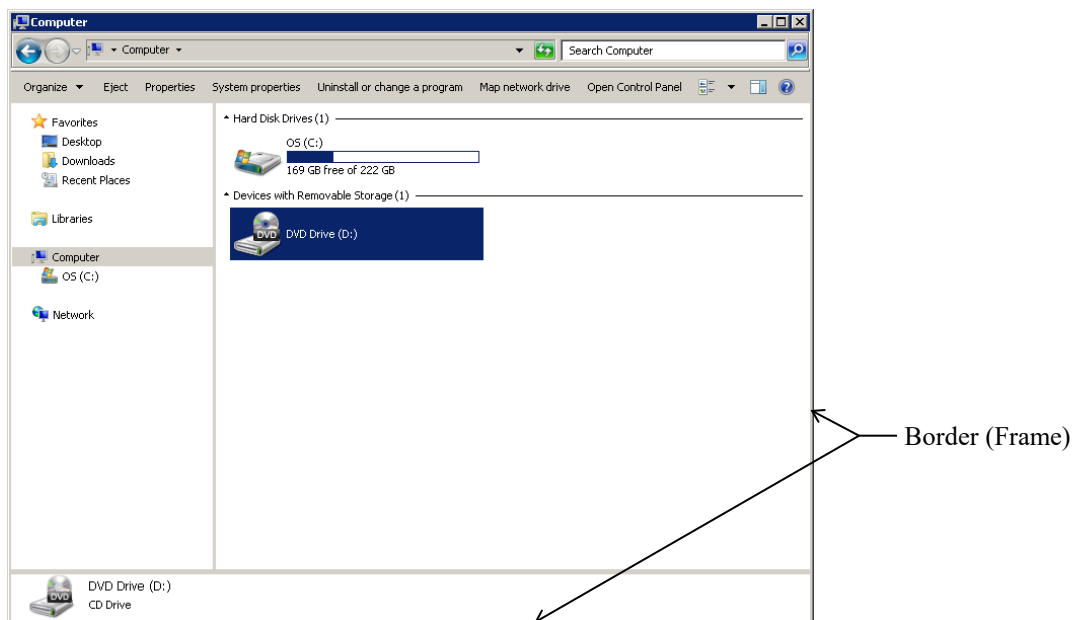
Move the pointer to the title bar with the mouse.

While pressing the button, move the window with the mouse or touchpad (DR) to a desired position and release the button.



(4) <Changing the window size>

Move the pointer to the window border (frame) (the pointer changes to the double-headed arrow). While pressing the button, move the border (the border changes to the broken line) until the window becomes a desired size, and release the button.



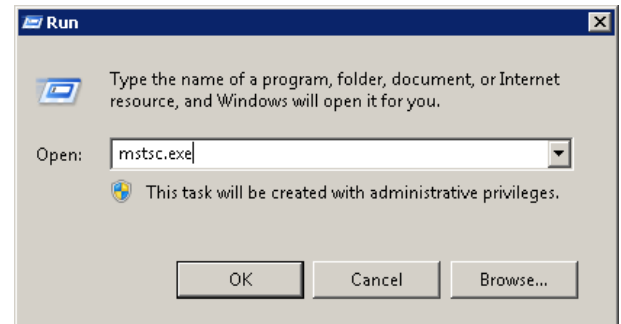
- (5) <Switching the screen (when two or more screens are opened)>  
While pressing the [Alt] key, press [Tab] key (or [Esc] key) until your desired window title is displayed, and release the [Alt] key.

## 2.1.2 Connecting the PC to the SVP

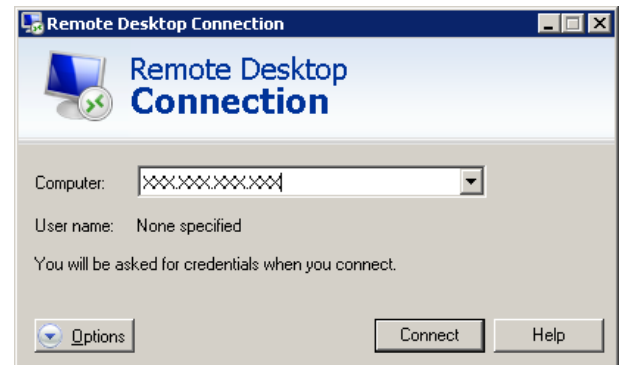
In order to connect to SVP (PC), execute remote desktop connection and perform the following procedures from a Maintenance PC.

### 2.1.2.1 Connection to the SVP

- (1) <Performing remote desktop connection>  
Select (CL) [Run...] from the [Start] menu.  
Enter “mstsc.exe” in the “Open” box, and select (CL) the [OK] button.

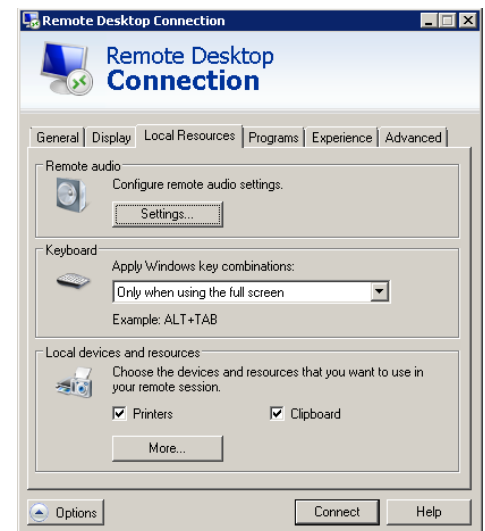


- (2) <Performing the connection>  
Enter IP address or host name of the SVP (PC), and select (CL) the [Connect] button.

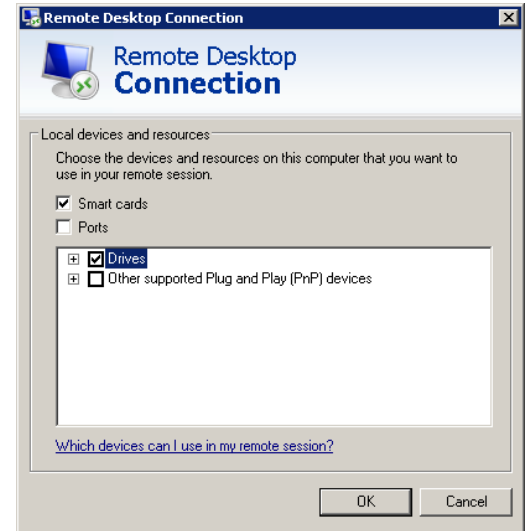


NOTE: Please check that automatic connection of a local disk drive is setup in the case of connection. Confirmation procedure is as follows.

- (a) Select (CL) the [Options] button.
- (b) Select (CL) the “Local Resources” tab in the ‘Remote Desktop Connection’ window.
- (c) Select (CL) the [More...] button in the “Local Resources” tab.

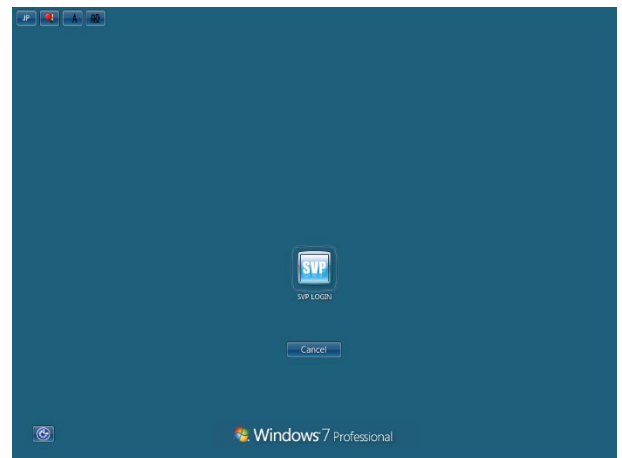


(d) Confirm that the “Drives” is checked.

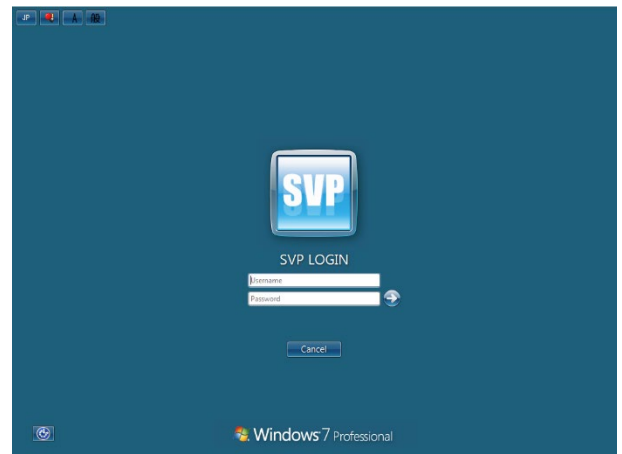


(3) <Performing logon>

Select (CL) SVP icon displayed in the middle of the window, and a window appears to enter user name and password.



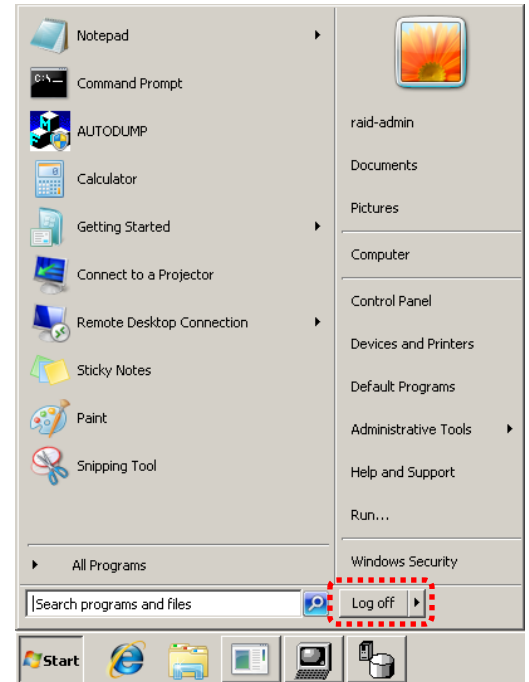
Enter user name and password and click the [→] button to logon to the SVP (PC).



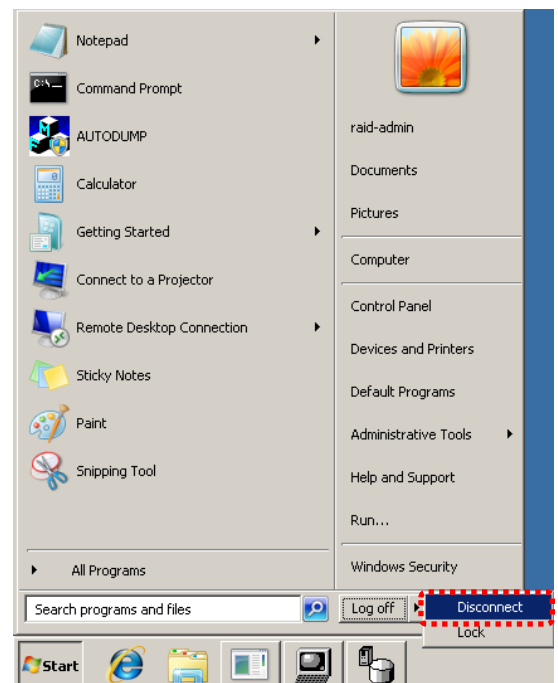
### 2.1.3 Disconnecting the SVP

Disconnect the Maintenance PC from the SVP.

- (1) <Log off SVP>  
Select (CL) [Log off] from the [Start] menu.  
The SVP window in the Maintenance PC is closed.



- (2) Disconnect the SVP  
Select (CL) [Log off]-[Disconnect] from the [Start] menu. The SVP window in the Maintenance PC is closed.



## 2.2 Reset Microprocessor

### 2.2.1 Checking of MP location

This section describes that the location of blocked MP.

1. Check the service information messages (SIMs) at the Alerts window (To open the Alerts window: In the Remote Web Console main window, select (CL) Alert).
2. Search SIM: 3073xy (Processor blocking).
3. Specify the location from the following chart.

<Usage Restrictions>

- Not to be used to recover hardware failures.
- Not to be used to recover a MP of MPB which all MP in MPB blocked.

Table 2.2.1-1 SIM Reference code of MP and correspondence table of location (1/4)

X	Y	DKC	MPB	Location			
0	0	0	MPB-1MA	MP00-1MA			
	1			MP01-1MA			
	2			MP02-1MA			
	3			MP03-1MA			
	4			MP04-1MA			
	5			MP05-1MA			
	6			MP06-1MA			
	7			MP07-1MA			
1	0		0	MPB-1MB	MP00-1MB		
	1				MP01-1MB		
	2				MP02-1MB		
	3				MP03-1MB		
	4				MP04-1MB		
	5				MP05-1MB		
	6				MP06-1MB		
	7				MP07-1MB		
2	0			0	MPB-1PE	MP00-1PE	
	1					MP01-1PE	
	2					MP02-1PE	
	3					MP03-1PE	
	4					MP04-1PE	
	5					MP05-1PE	
	6					MP06-1PE	
	7					MP07-1PE	
3	0				0	MPB-1PF	MP00-1PF
	1						MP01-1PF
	2						MP02-1PF
	3						MP03-1PF
	4	MP04-1PF					
	5	MP05-1PF					
	6	MP06-1PF					
	7	MP07-1PF					

Table 2.2.1-1 SIM Reference code of MP and correspondence table of location (2/4)

X	Y	DKC	MPB	Location			
4	0	0	MPB-2MA	MP00-2MA			
	1			MP01-2MA			
	2			MP02-2MA			
	3			MP03-2MA			
	4			MP04-2MA			
	5			MP05-2MA			
	6			MP06-2MA			
	7			MP07-2MA			
5	0		0	MPB-2MB	MP00-2MB		
	1				MP01-2MB		
	2				MP02-2MB		
	3				MP03-2MB		
	4				MP04-2MB		
	5				MP05-2MB		
	6				MP06-2MB		
	7				MP07-2MB		
6	0			0	MPB-2PE	MP00-2PE	
	1					MP01-2PE	
	2					MP02-2PE	
	3					MP03-2PE	
	4					MP04-2PE	
	5					MP05-2PE	
	6					MP06-2PE	
	7					MP07-2PE	
7	0				0	MPB-2PF	MP00-2PF
	1						MP01-2PF
	2						MP02-2PF
	3						MP03-2PF
	4	MP04-2PF					
	5	MP05-2PF					
	6	MP06-2PF					
	7	MP07-2PF					

Table 2.2.1-1 SIM Reference code of MP and correspondence table of location (3/4)

X	Y	DKC	MPB	Location			
8	0	1	MPB-1MC	MP00-1MC			
	1			MP01-1MC			
	2			MP02-1MC			
	3			MP03-1MC			
	4			MP04-1MC			
	5			MP05-1MC			
	6			MP06-1MC			
	7			MP07-1MC			
9	0		1	MPB-1MD	MP00-1MD		
	1				MP01-1MD		
	2				MP02-1MD		
	3				MP03-1MD		
	4				MP04-1MD		
	5				MP05-1MD		
	6				MP06-1MD		
	7				MP07-1MD		
A	0			1	MPB-1PL	MP00-1PL	
	1					MP01-1PL	
	2					MP02-1PL	
	3					MP03-1PL	
	4					MP04-1PL	
	5					MP05-1PL	
	6					MP06-1PL	
	7					MP07-1PL	
B	0				1	MPB-1PM	MP00-1PM
	1						MP01-1PM
	2						MP02-1PM
	3						MP03-1PM
	4	MP04-1PM					
	5	MP05-1PM					
	6	MP06-1PM					
	7	MP07-1PM					

Table 2.2.1-1 SIM Reference code of MP and correspondence table of location (4/4)

X	Y	DKC	MPB	Location			
C	0	1	MPB-2MC	MP00-2MC			
	1			MP01-2MC			
	2			MP02-2MC			
	3			MP03-2MC			
	4			MP04-2MC			
	5			MP05-2MC			
	6			MP06-2MC			
	7			MP07-2MC			
D	0		1	MPB-2MD	MP00-2MD		
	1				MP01-2MD		
	2				MP02-2MD		
	3				MP03-2MD		
	4				MP04-2MD		
	5				MP05-2MD		
	6				MP06-2MD		
	7				MP07-2MD		
E	0			1	MPB-2PL	MP00-2PL	
	1					MP01-2PL	
	2					MP02-2PL	
	3					MP03-2PL	
	4					MP04-2PL	
	5					MP05-2PL	
	6					MP06-2PL	
	7					MP07-2PL	
F	0				1	MPB-2PM	MP00-2PM
	1						MP01-2PM
	2						MP02-2PM
	3						MP03-2PM
	4	MP04-2PM					
	5	MP05-2PM					
	6	MP06-2PM					
	7	MP07-2PM					

Eg.) 307311 (DKC-0, MPB-1MB, MP01-1MB)

3073B7 (DKC-1, MPB-1PM, MP07-1PM)

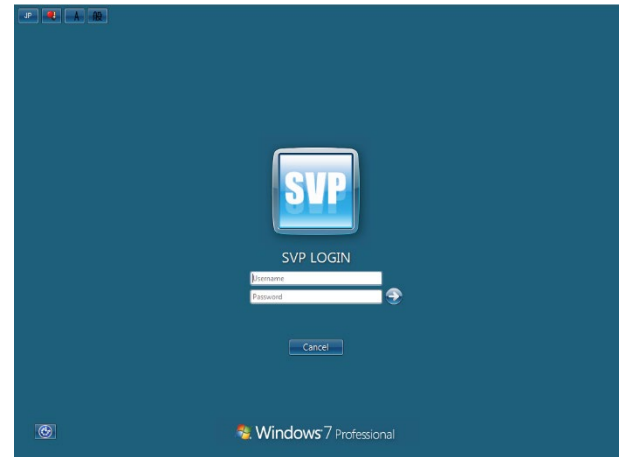
## 2.2.2 Procedure for MP resetting

### (1) <Connection to the SVP>

Connect to SVP using remote desktop connection from a Maintenance PC.

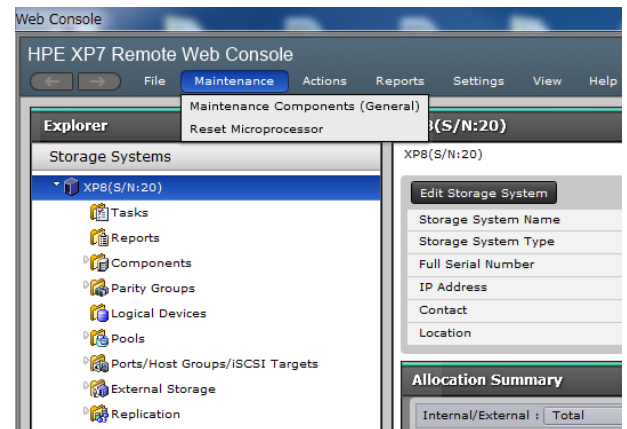
For details, see “2.1.2 Connecting the PC to the SVP”.

Enter user name and password of user maintenance personnel account, and select (CL) the [→] button.



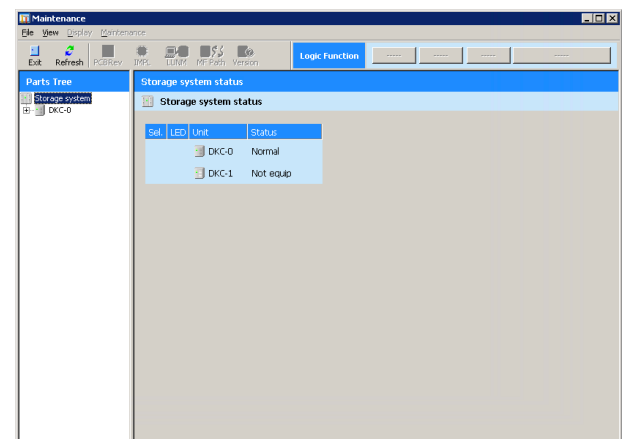
### (2) <Starting a window>

Select (CL) [Maintenance]-[Reset Microprocessor] from the menu in the ‘Web Console’ window.

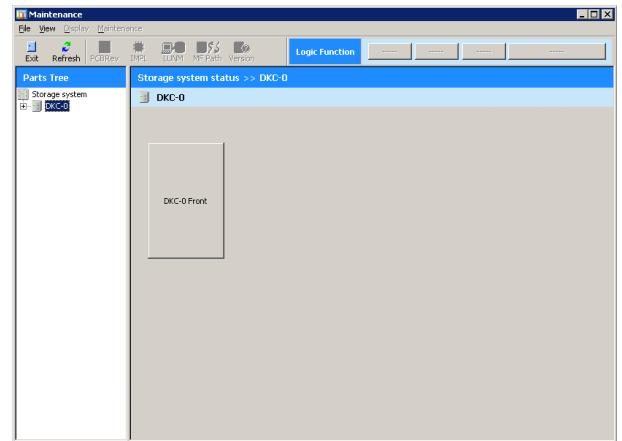


### (3) <Select DKC-n>

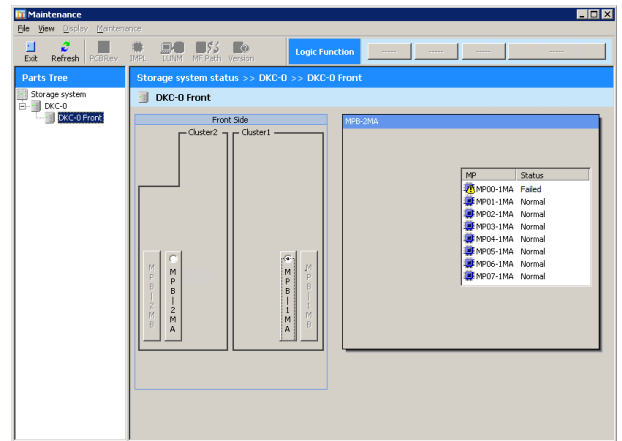
Select (CL) [DKC-n] in the ‘Maintenance’ window.



- (4) <Select DKC-n Front>  
Select (CL) [DKC-n Front] in the [DKC-n].

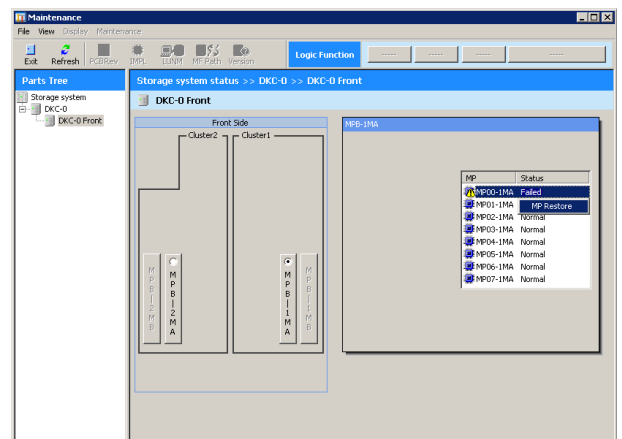


- (5) <Select MP PCB>  
Select (CL) [MPB-nXX] in the [DKC-n Front].



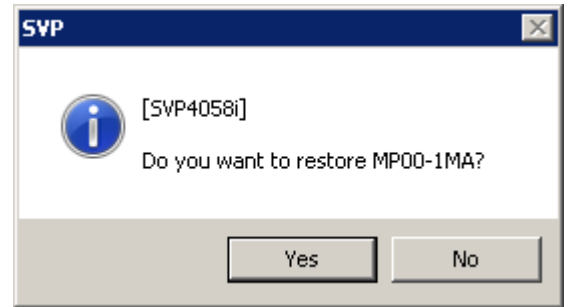
Eg. MPB-1MA

- (6) <Specify reset of MP>  
Make sure that the Status is "Failed".  
Select (CL) [MP Restore] in the context menu.



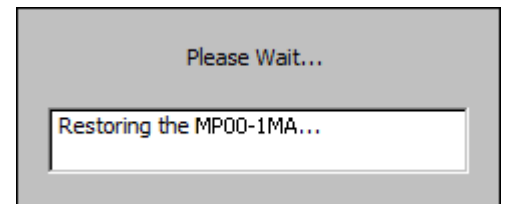
Eg. MPB-1MA

- (7) <Check the beginning of MP Restore>  
Select (CL) [Yes] in response to “Do you want to restore MPnn-nXX?”.



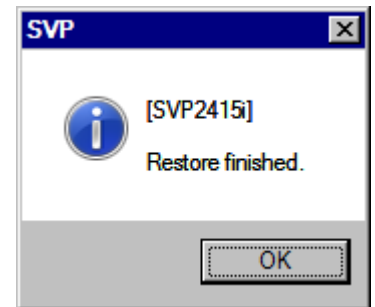
Eg. MP00-1MA

- (8) <Restoring>  
Restoring MP.



Eg. MP00-1MA

- (9) <Check end of restore>  
Select (CL) [OK] in response to “Restore finished.”.



- (10) <Log off the SVP>  
Select (CL) the [Exit] button on the ‘Maintenance’ window to close the window.

Log off the SVP.  
For logoff, see “2.1.3 Disconnecting the SVP”.

