

[SSVP REPLACEMENT PROCESSING - RSSV]

1. Connecting the Maintenance PC

Connect the Maintenance PC to the SSVP, and then log in to the SVP.

- (1) Connect the Maintenance PC to the storage system with a LAN cable according to “Attachment/Removal Procedure of Maintenance PC” ([INST\(IN\)13-02-10](#)).

When replacing SSVP0 in the storage system in which the SVP High Reliability Kit is installed, connect the Maintenance PC to SSVP1.

- (2) Perform the remote desktop connection to the SVP according to the procedure described in “Connection to the SVP” ([SVP01-30](#)).

If the remote desk top connection to the SVP is not possible, perform the recovery procedure described in “When Connection to SVP (Remote Computer) Cannot Be Made” ([TRBL03-30-40](#)).

2. Starting the SVP window

From the menu of Web Console, click [Maintenance Components]-[Maintenance Other Components]-[Maintenance Other Components (General)].

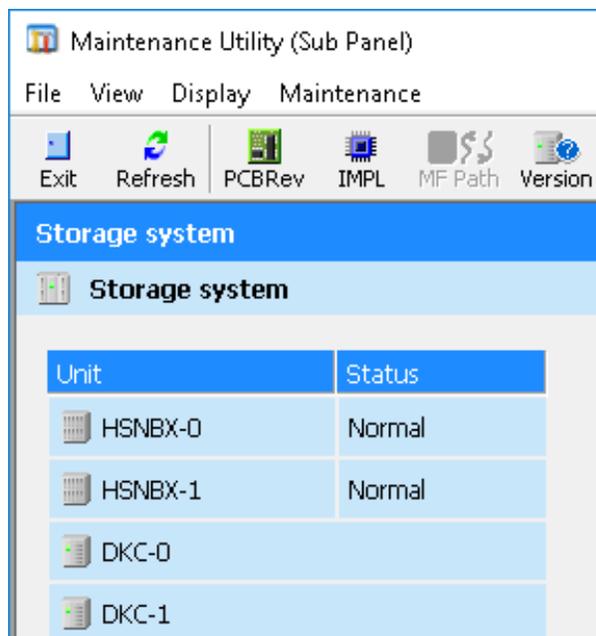
3. Operation mode change

Change the mode to [Modify Mode].

Click the [Maintenance Utility (Sub Panel)].

4. Specifying the part to be replaced (1)

In the Maintenance Utility (Sub Panel) window, select the HSNBX in which the SSVP to be replaced is installed.



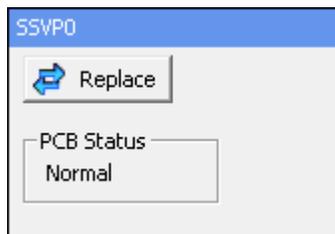
5. Specifying the part to be replaced (2)

Click the SSVP to be replaced.



(Example where SSVP0 is replaced)

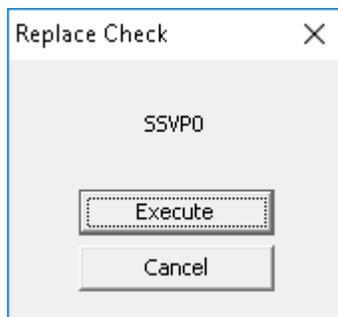
6. Click the [Replace].



(Example where SSVP0 is replaced)

7. The Replace Check window is displayed.

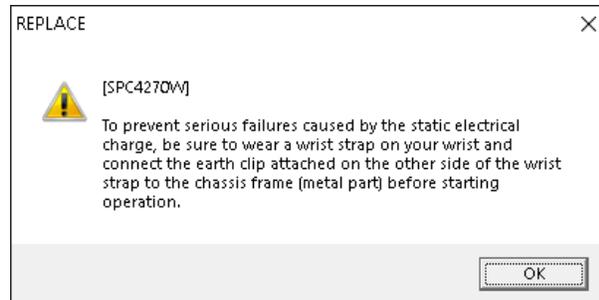
Click [Execute].



(Example where SSVP0 is replaced)

8. <Wear a wrist strap without fail>

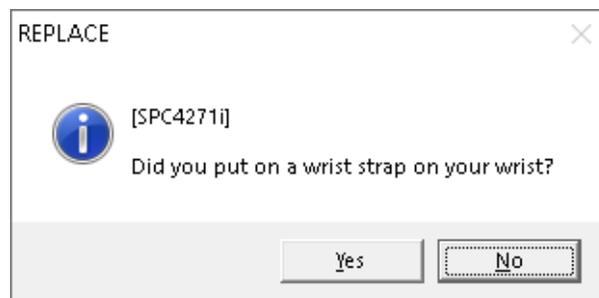
The message “To prevent serious failures caused by the static electrical charge, be sure to wear a wrist strap on your wrist and connect the earth clip attached on the other side of the wrist strap to the chassis frame (metal part) before starting operation.” is displayed.



Wear a wrist strap, and then click [OK].

The message “Did you put on a wrist strap on your wrist?” is displayed.

Click [Yes], and then go to [Step 9](#).



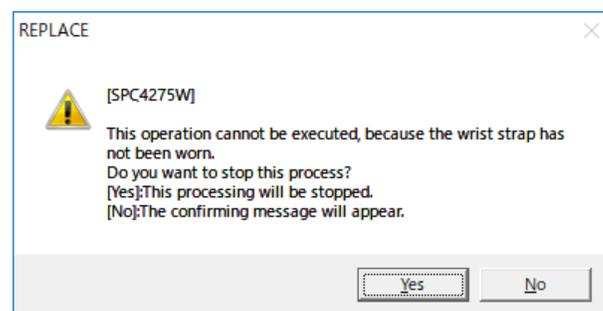
NOTE: If you are not wearing a wrist strap, click [No] in response to the message above. Then, the message below is displayed. Click [Yes] to stop the processing, wear a wrist strap, and then resume the operation

“This operation cannot be executed, because the wrist strap has not been worn.

Do you want to stop this process?

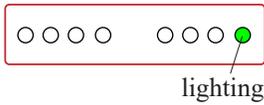
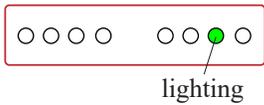
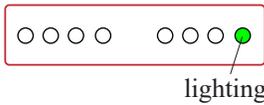
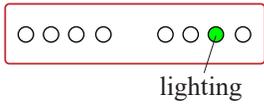
[Yes]: This processing will be stopped.

[No]: The confirming message will appear.”

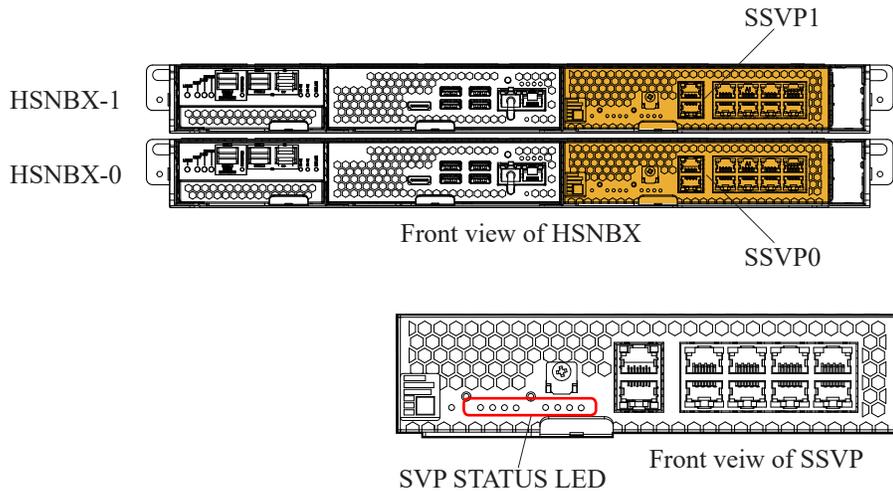


9. <Replying to the confirmation message for starting the replacement>

The following message is displayed, click [Yes].

Replacement target	SVP STATUS LED (*1)	Message
SSVP0	Master SVP 	During the replacement of the target part, the REMOTE MAINTENANCE switch and the environment monitoring will be disabled and the communication between SVP and SSVP will be blocked. Do you want to replace "SSVP0"?
	Standby SVP 	During the replacement of the target part, the REMOTE MAINTENANCE switch and the environment monitoring will be disabled. Do you want to replace "SSVP0"?
SSVP1	Master SVP 	During the replacement of the target part, the environment monitoring will be disabled and the communication between SVP and SSVP will be blocked. Do you want to replace "SSVP1"?
	Standby SVP 	During the replacement of the target part, the environment monitoring will be disabled. Do you want to replace "SSVP1"?

*1: SVP STATUS LED Locations



NOTE:

- During replacement of SSVP (Step 10. to completion of Step 16.), failures of parts cannot be detected because the environment monitoring is disabled. Therefore, after replacement of SSVP, you need to check the statuses of parts in the Maintenance Utility (Sub Panel) window and the SIM log. Follow the procedures described later.
- During replacement of SSVP0 (Step 10. to completion of Step 16.), do not use the REMOTE MAINTENANCE switch. Even if you operate the switch, you cannot change the setting.
- During replacement of the SSVP next to the Master SVP, communications between SVP and SSVP, and between SSVPs, are blocked, and the remote desktop connection between the Maintenance PC and SVP is disconnected. Therefore, after replacement of the SSVP, you need to perform the remote desktop connection to the SVP again. Follow the procedure described later.

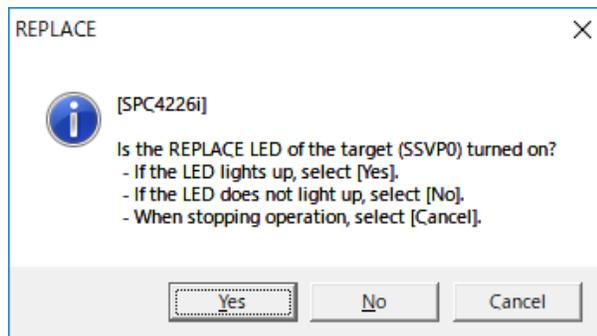
10. <Confirming the part to be replaced (1)>

The following message is displayed:

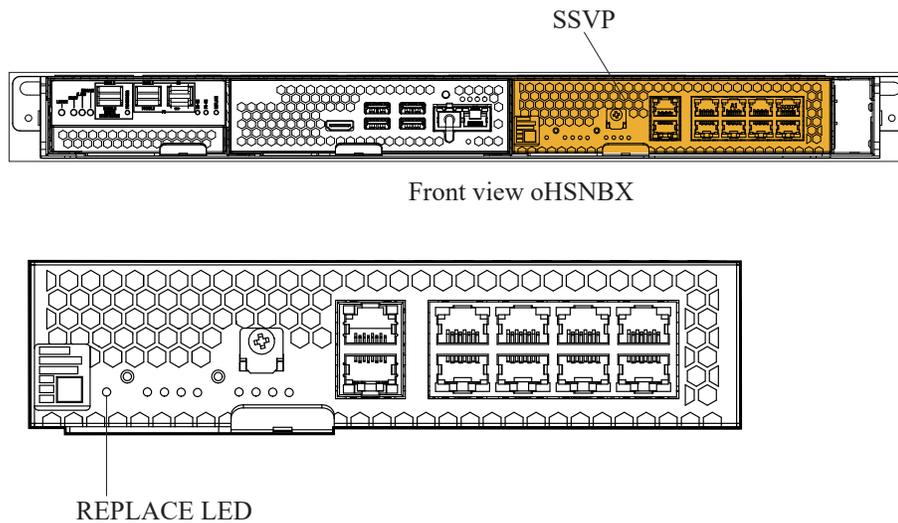
"Is the REPLACE LED of the target (xxx) turned on?"

- If the LED lights up, select [Yes].
- If the LED does not light up, select [No].
- When stopping operation, select [Cancel].

NOTE: SSVPO or SSVPI to be replaced is displayed in xxx.



Check the status of the REPLACE LED (red) on the SSVP to be replaced.



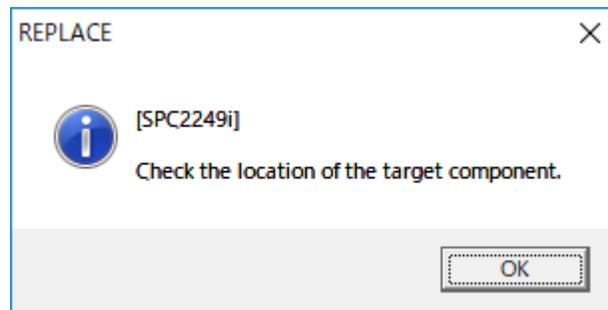
When the REPLACE LED lights up, click [Yes]. Then, go to [Step 12](#).

When the REPLACE LED does not light up, click [No]. Then, go to [Step 11](#).

11. <Confirming the part to be replaced (2)>

The following message is displayed:

“Check the location of the target component.”



The REPLACE LED does not help you confirm the part to be replaced. See [\(LOC02-30\)](#) to confirm the installation location of the SSVP to be replaced. After confirming the location, click [OK].

12. <Starting the hardware replacement>

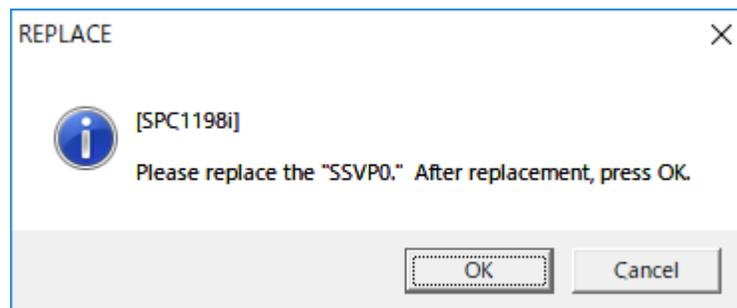
The followin message is displayed:

“Please replace the "xxx." After replacement, press OK.”

NOTE : Do not reply to the message in this step.

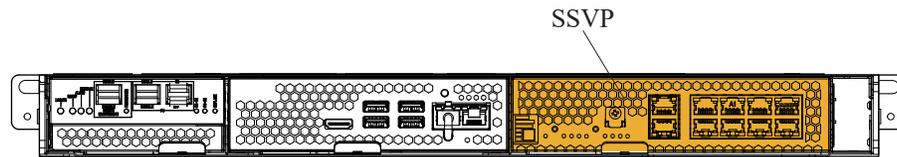
Reply to the message after completion of the hardware replacement.

NOTE: SSVP0 or SSVP1 to be replaced is displayed in xxx.



13. <SSVP Replacement Processing>

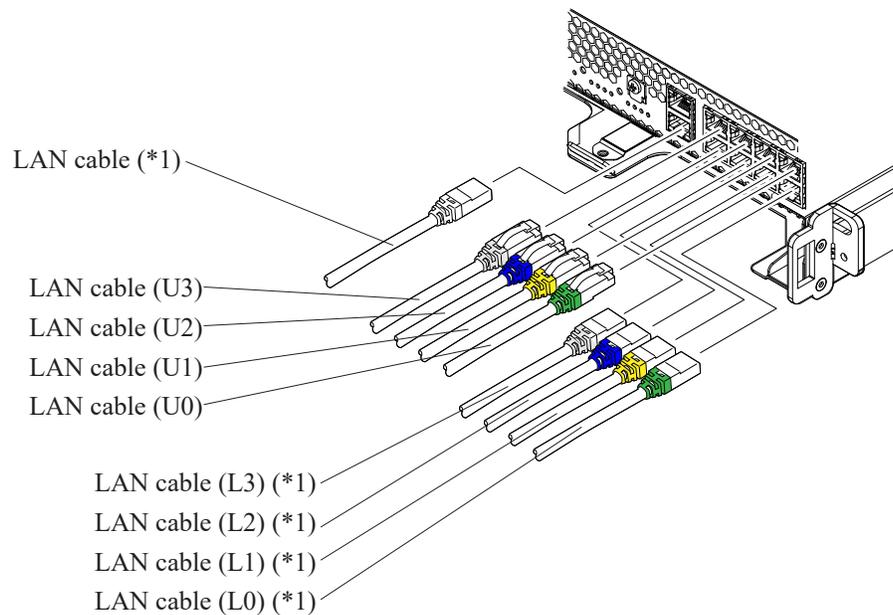
Location	Function Name of Component	Part Name
Front of HSNBX	1 SSVP	SSVP



Front View of HSNBX

NOTICE: To prevent part failures caused by static electrical charge built up on your own body, be sure to wear a wrist strap connected to the Storage System before starting and do not take it off until you finish. Refer to "Note on Installing and Removing Parts" ([REP\(GE\)01-30](#)).

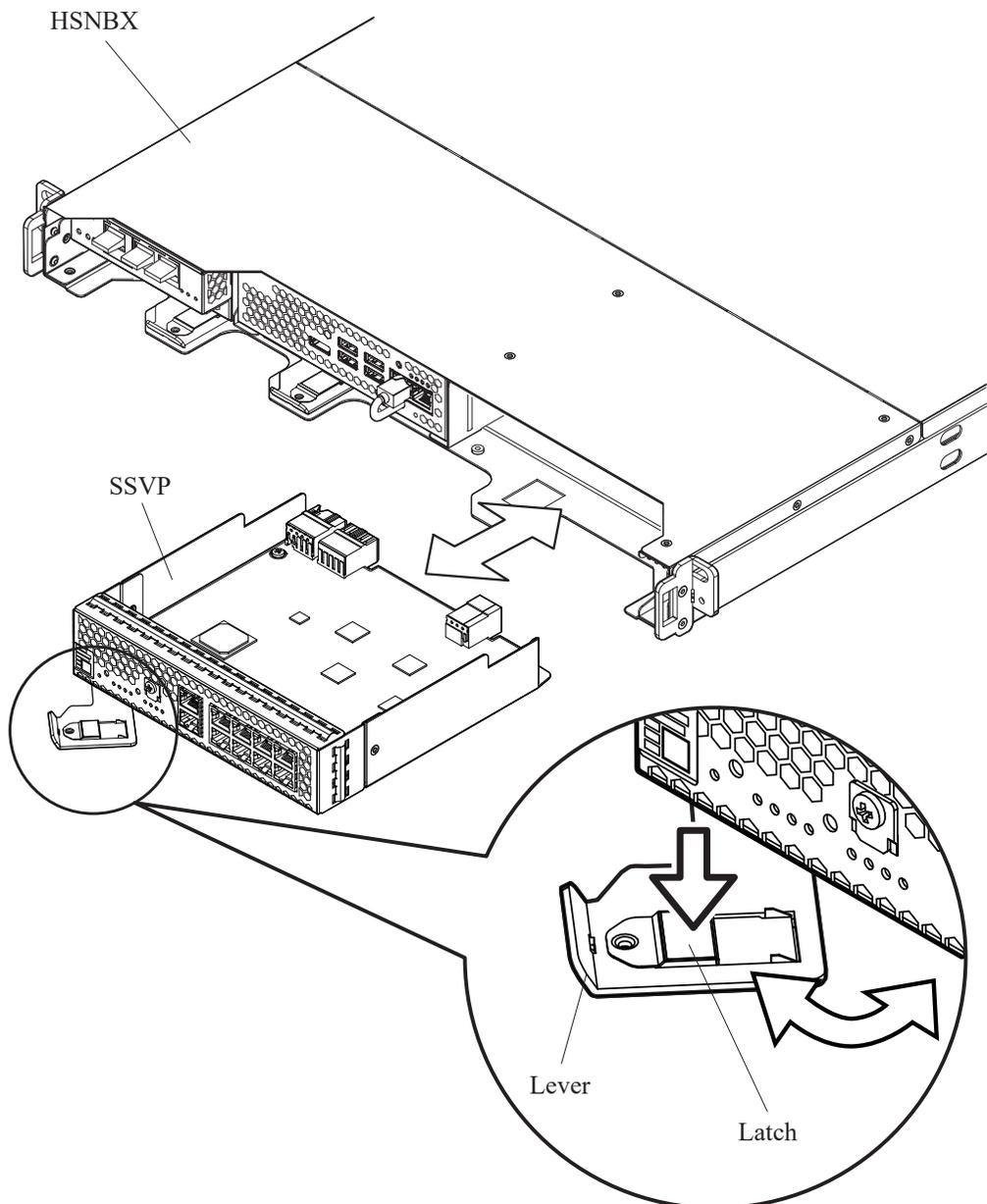
- (1) Remove the cables from the SSVP to be replaced.



- *1: These cables may not be connected to the SSVP.

- (2) Replacing the SSVP
 - (a) Open the lever while pressing its latch securing the SSVP.
 - (b) Open the lever completely until the SSVP is pulled out toward you.
 - (c) Remove the SSVP by pulling it out while holding it with your hands.
 - (d) Open the lever on the new SSVP completely toward you.
 - (e) Insert the SSVP fully and push the lever until the latch on the lever clicks and is locked.

Figure 1-1 Replacing the SSVP



- (3) Connect the cables which were removed in step (1) to the new SSVP.

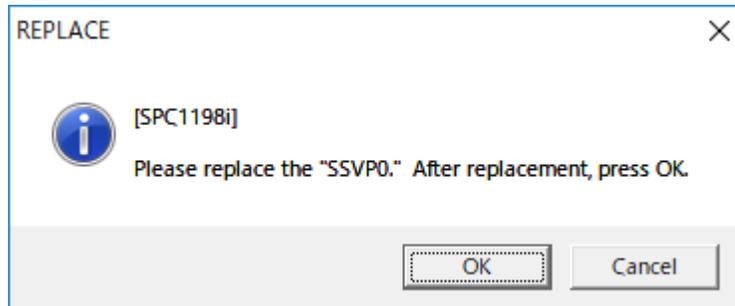
14. <Reconnecting to the SVP>

If the SSVP next to the Master SVP is replaced, the remote desktop connection between the Maintenance PC and the SVP is disconnected. Perform the remote desktop connection to the SVP again.

15. <Completing the hardware replacement>

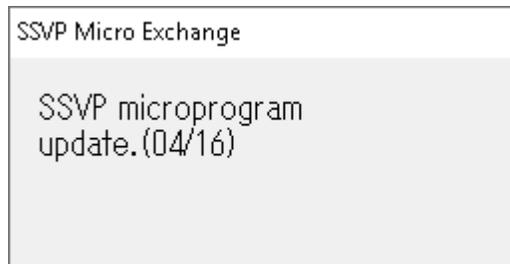
The message "Please replace the "xxx." After replacement , press OK." is displayed. Click [OK].

NOTE: SSVP0 or SSVP1 to be replaced is displayed in xxx.



16. <SSVP micro-program exchange>

The SSVP micro-program exchange is executed. It takes about 15 minutes for the SSVP micro-program exchange to be completed.

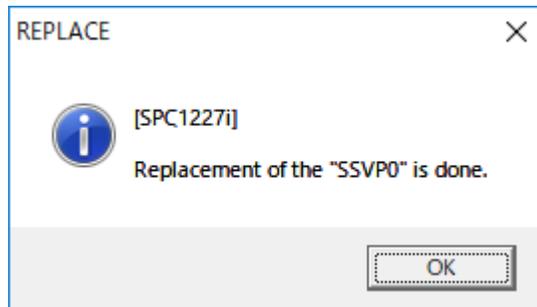


17. <Completing the replacement work>

The message "Replacement of the "xxx" is done." is displayed.

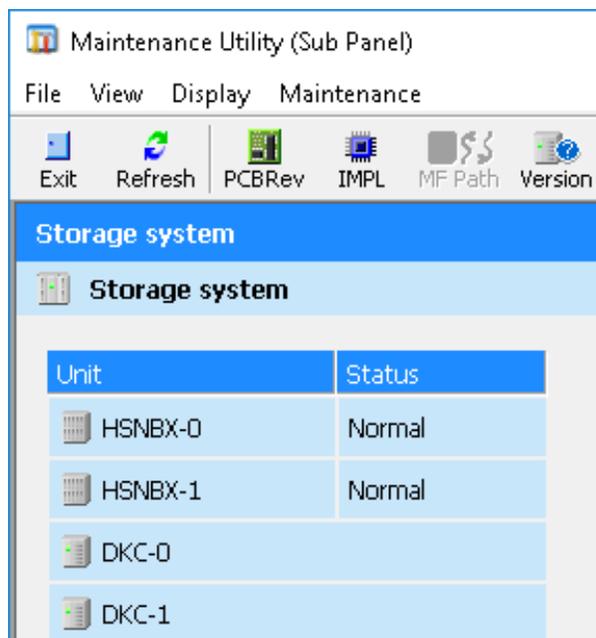
Click [OK].

NOTE: SSVPO or SSVPI to be replaced is displayed in xxx.



18. <Checking the status of the HSNBX>

Check that the status of the HSNBX in which the SSVP is not replaced is "Normal".



19. <Backing up the configuration information>

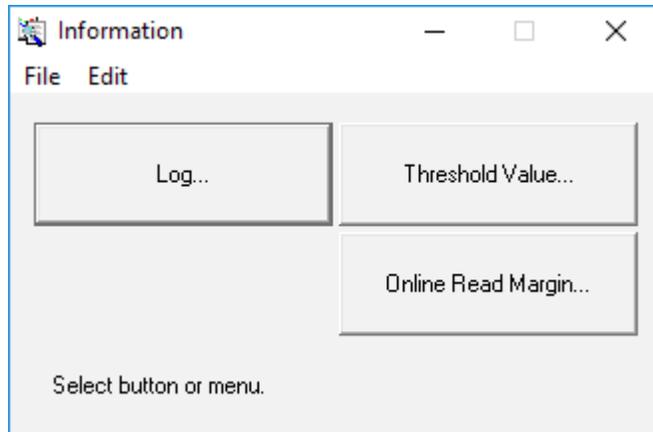
If you have replaced SSVPI, this step is not necessary. Go to the next step.

If you have replaced SSVPO, get the backup of the configuration information (see [\(SVP02-10-10\)](#)).

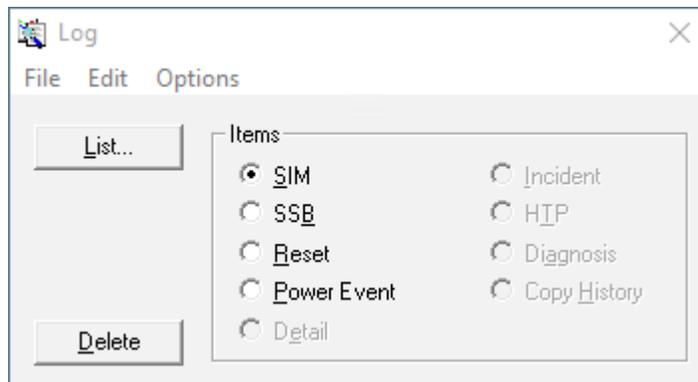
Specify SSVP for the backup location of the configuration information.

20. Completing the SIM log

- (1) Select [Information].
- (2) In the “Information” window, click [Log...].

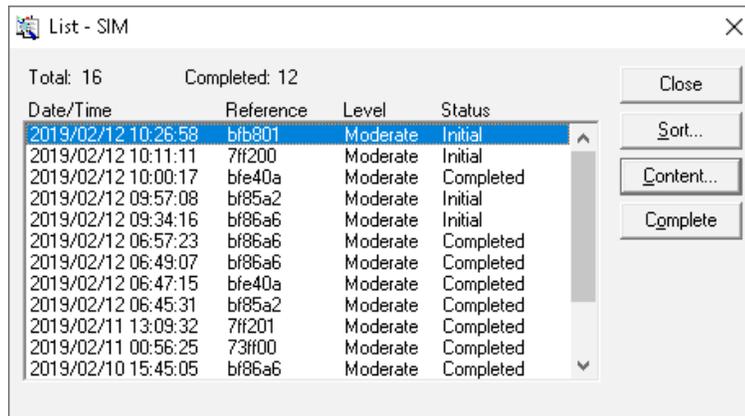


- (3) In the “Log” window, select [SIM] and then [List...].

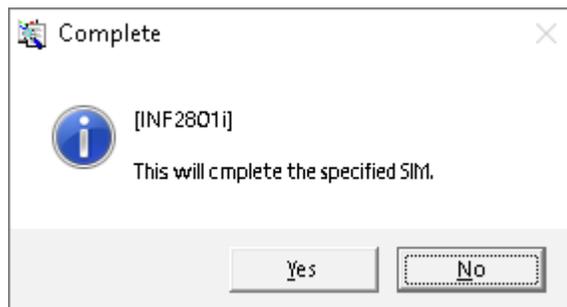


- (4) In the “List-SIM” window, select the data for which you end the process, and then click [Complete].

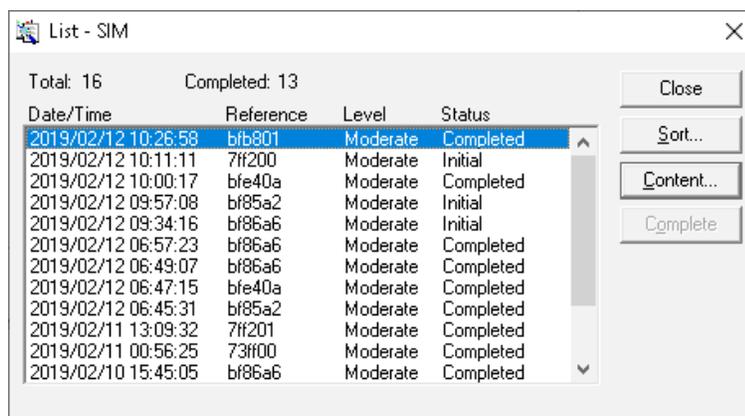
NOTE: During the replacement of the SSVP (from [Step 10](#). to [Step 16](#). completion), the environment monitor is disabled, and occurrences of part failures cannot be detected. Therefore, check whether SIMs other than the SIMs related to the replacement work exist.



- (5) In the “Complete” window, click [Yes].



- (6) In the “List-SIM” window, confirm that the “Status” of the data has become “Completed”.



- (7) In the “List-SIM” window, click [Close].
Close the “Log” window, then the “Information” window.

NOTE: If the MESSAGE LED is lit on the HSNPANEL after you complete all SIMs, display SIMs to check that SIM statuses are “Completed”. If SIM statuses are not “Completed”, wait for five minutes, and then perform the procedure for completing the SIM log again.

21. Operation mode change

Change the mode to [View Mode] in the SVP window.

22. Checking Normality

Perform the normality check according to “Checking Normality ([TRBL02-06-10](#))”.

23. Executing LAN Check

Perform a diagnosis of LAN Check ([DIAG03-10](#)).

When there is an error, perform “Recovery Procedure for Error Parts Detected by LAN Check” ([TRBL02-04-440](#)).