

WEB CONSOLE SECTION

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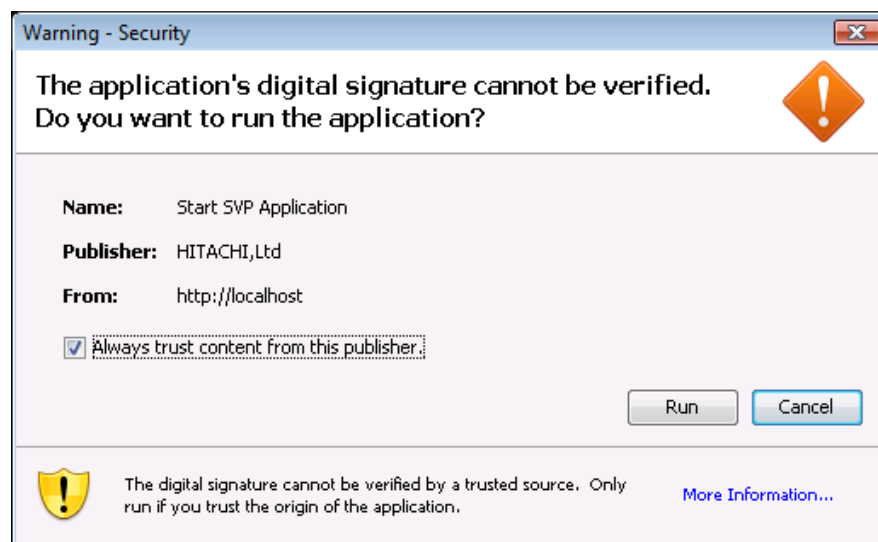
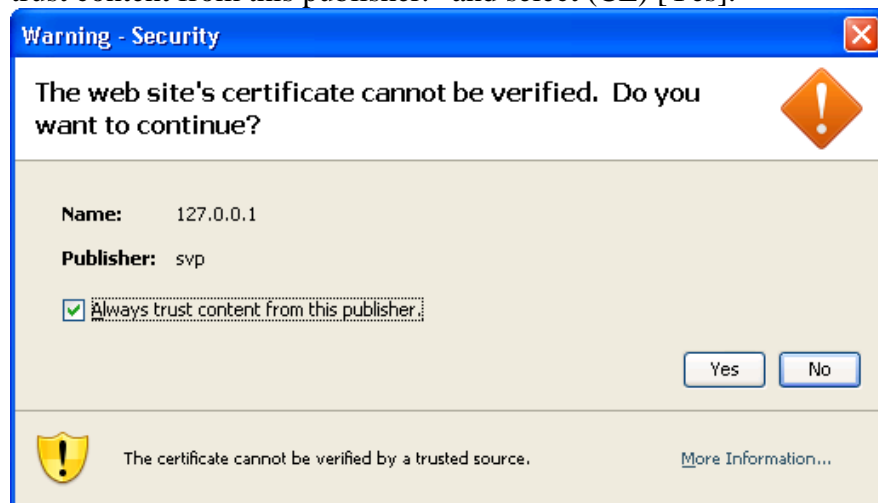
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1. Before using Web Console

Settings of JAVA and an IP address are required to use Web Console on SVP.

Refer to “Hitachi Storage Navigator User Guide” for the specification of the commonness part of Web Console for the operation and conventions.

This screen will not be displayed from the next startup when you check the check box of “Always trust content from this publisher.” and select (CL) [Yes].



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Note: They are notes for a remote desktop connection to SVP.

There are cases that users copy a file from SVP to the client PC via Remote Desktop in Web Console. If the client PC works on Windows XP (SP3), a file is destroyed when you copy it via Remote Desktop.

This is a known problem in Windows.

Please deal according to the content described in following URL.

<http://support.microsoft.com/kb/972828>

1.1 Setting IP Address and Network

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 (See [LOC04-70](#)).

Please setup according to the worksheet which the user's administrator indicated at the time of a new Installation.

Please setup the contents which took the duplicate from a set up on SVP before REPLACE.

Note: Don't change connection name. If you do so, Web Console will not work.

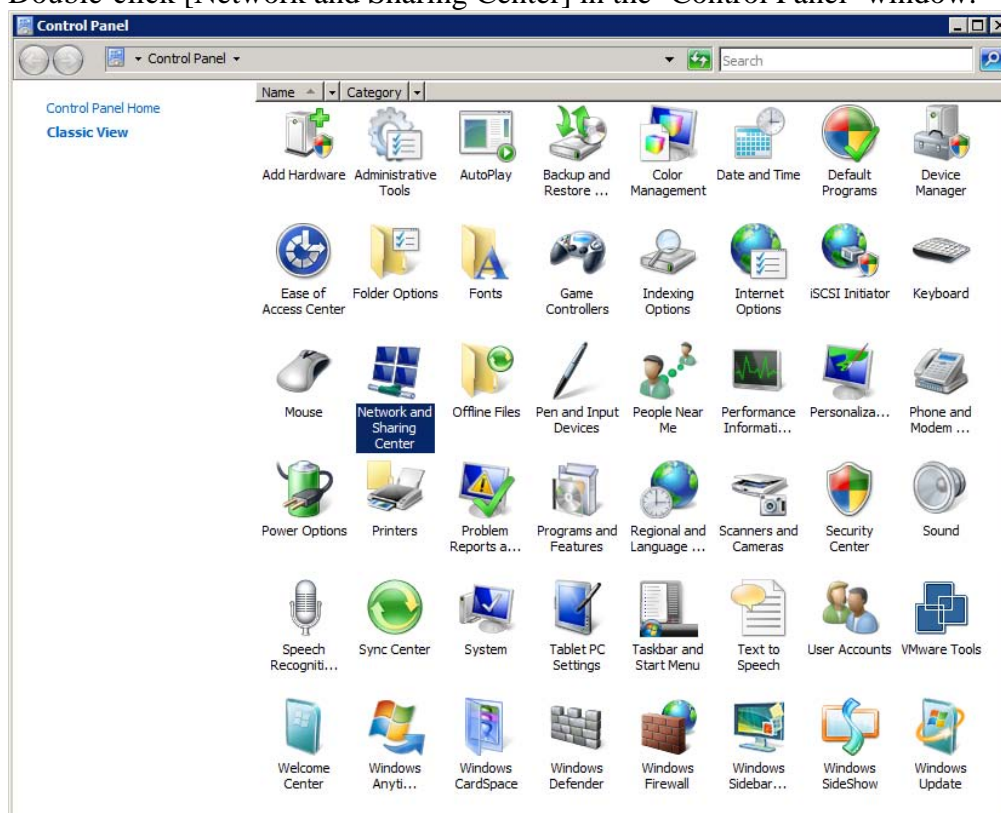
(1) Setting IP address

(a) Opening the Control Panel window

Select (CL) [Control Panel] from the [Start]-[Settings] menu.

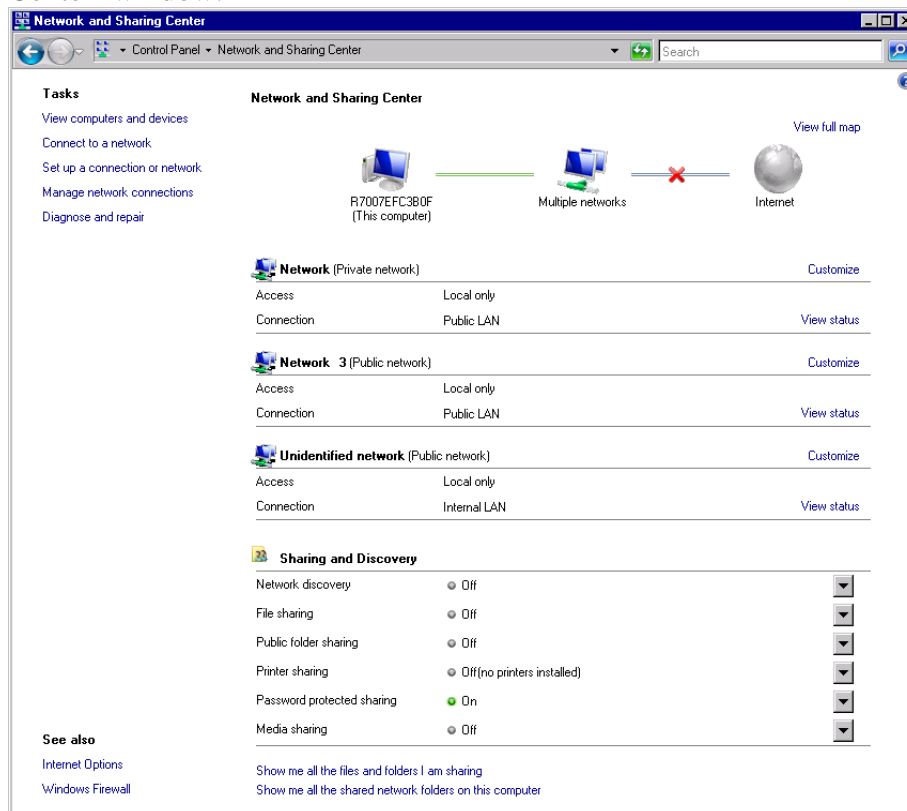
(b) Opening the Network and Sharing Center window

Double-click [Network and Sharing Center] in the 'Control Panel' window.



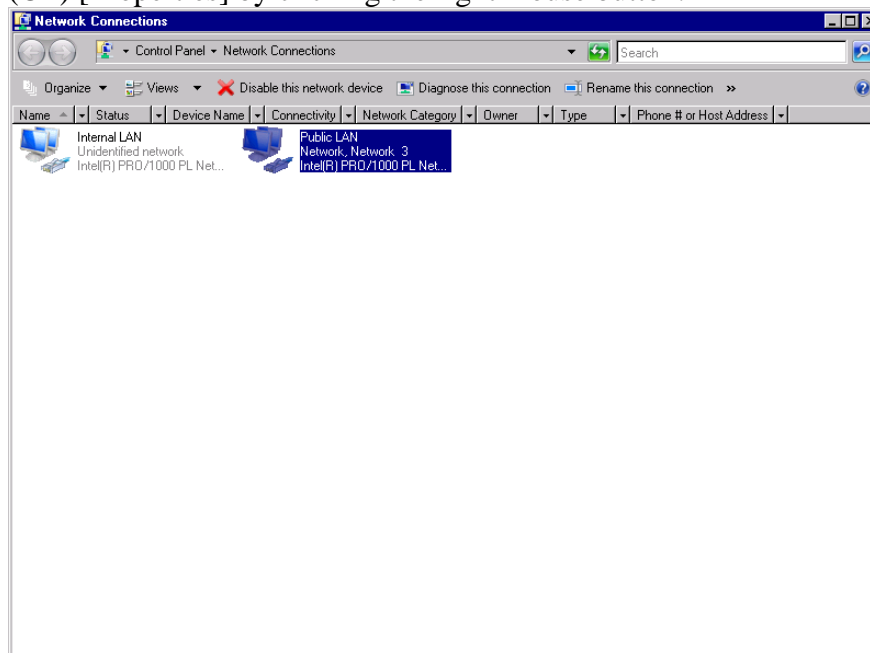
(c) Opening the Manage network connections window

Select (CL) [Manage network connections] in the left side of 'Network and Sharing Center' window.

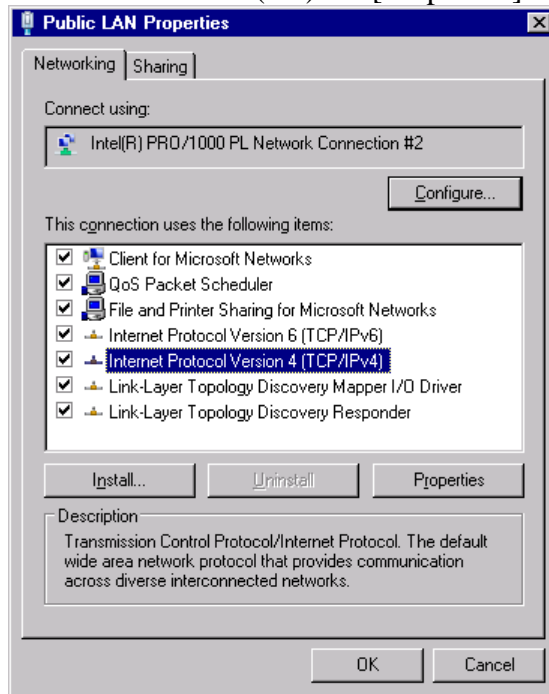


(d) Opening the Public LAN Properties window

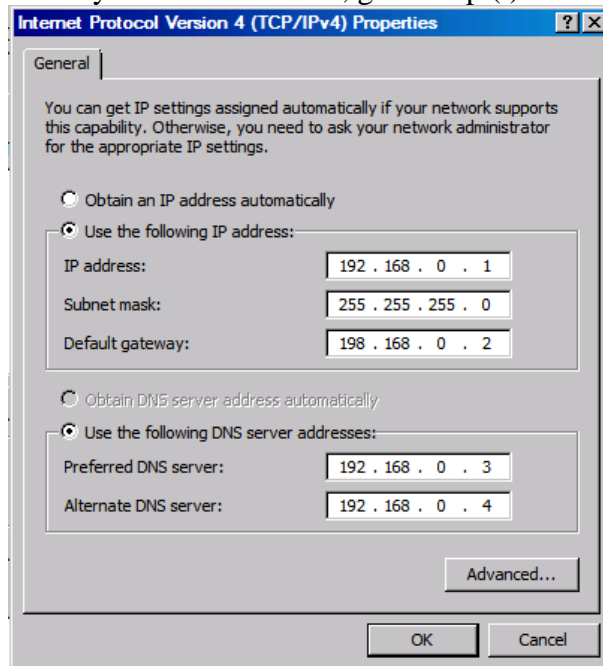
Select (CL) [Public LAN Properties] in the 'Network Connections' window and select (CL) [Properties] by clicking the right mouse button.



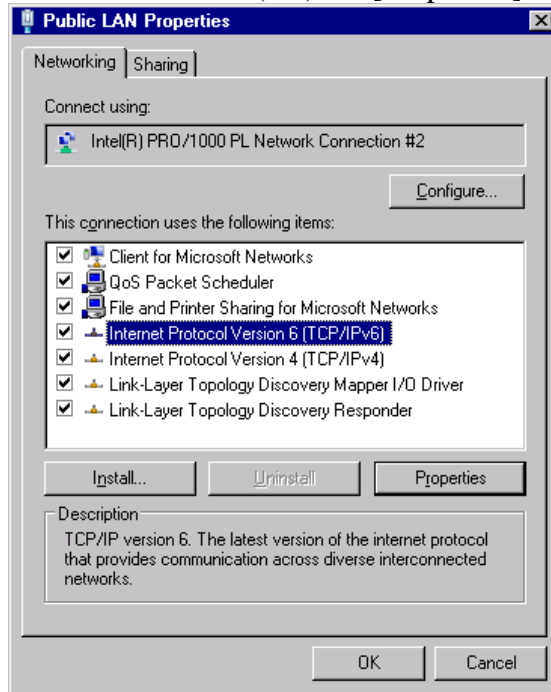
- (e) Opening the Internet Protocol Version 4 (TCP/IPv4) Properties window
Select (CL) [Internet Protocol Version 4 (TCP/IPv4)] in the ‘Public LAN Properties’ window and select (CL) the [Properties] button.



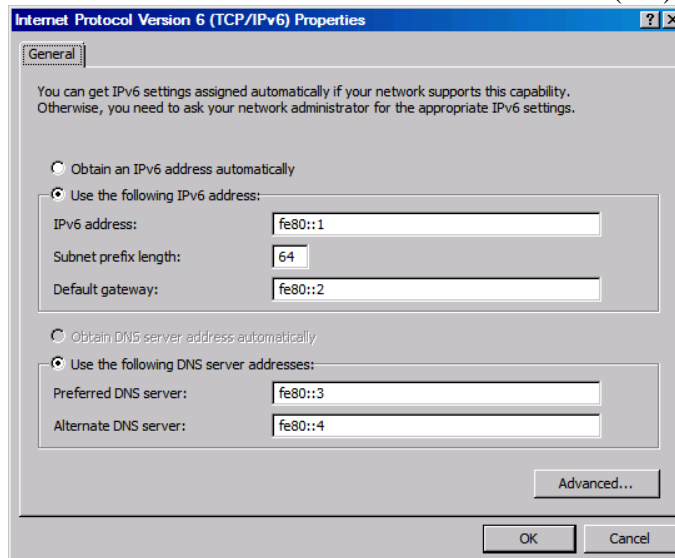
- (f) Setting the external IP address
Set the “IP address”, “Subnet mask”, “Default gateway”, “Preferred DNS server” and “Alternate DNS server” and select (CL) the [OK] button.
When you do not set IPv6, go to step (i).



- (g) Opening the Internet Protocol Version 6 (TCP/IPv6) Properties window
Select (CL) [Internet Protocol Version 6 (TCP/IPv6)] in the ‘Public LAN Properties’ window and select (CL) the [Properties] button.



- (h) Setting the external IP address
Set the “IPv6 address”, “Subnet prefix length”, “Default gateway”, “Preferred DNS server” and “Alternate DNS server” and select (CL) the [OK] button.



- (i) Closing the window
After the setting is completed, select (CL) the [OK] button in the “Public LAN Properties” window.

(2) Setting Network Connection Properties

Checking whether the setting of the network (setting of Config) must be changed or not. Ask the customer about the setting of the switch (HUB) connected to the SVP. When the case is not the above, terminate the operation by selecting (CL) the [OK] button.

There is a case where the setting must be changed depending on the customer's environment. The case where the change is required is as follows.

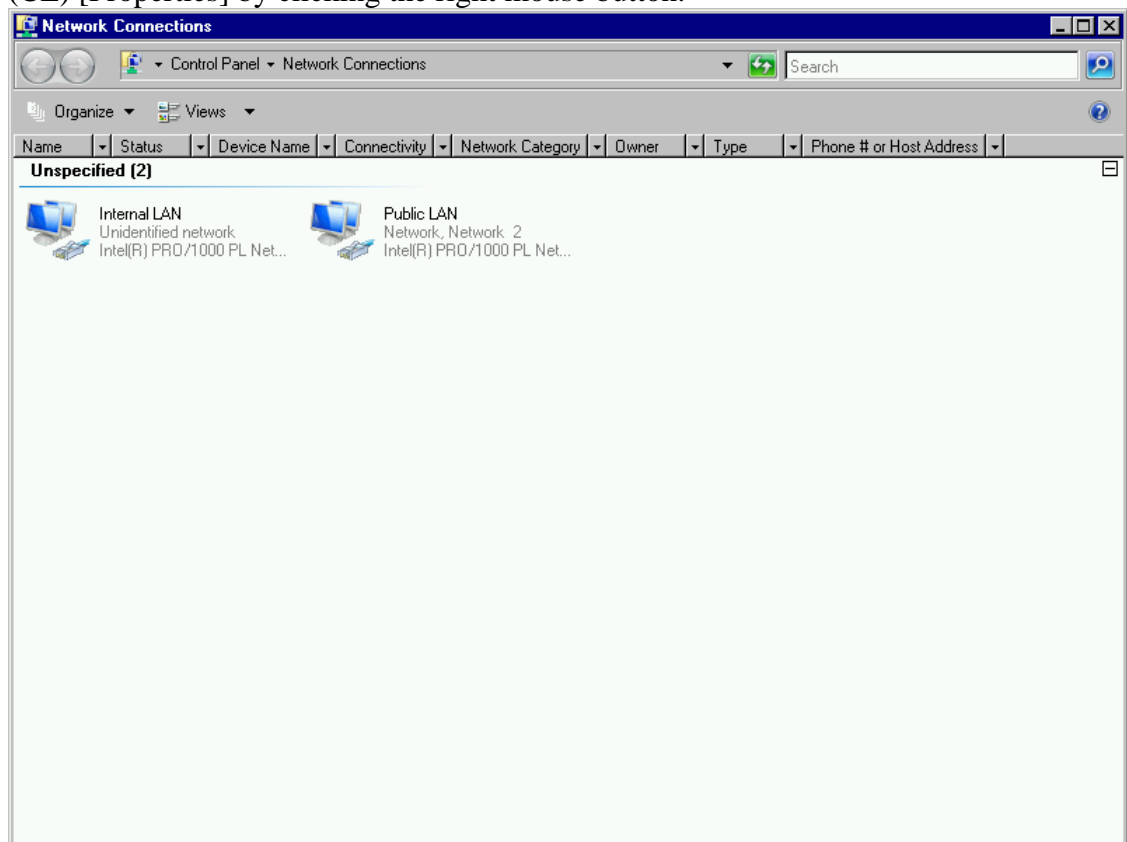
(Normally, no setting change is required.)

- When the switch (HUB), setting of which is fixed as '100M Full Duplex', is connected to the PC of the SVP

Note: The setting of the SVP made is "Auto Negotiation".

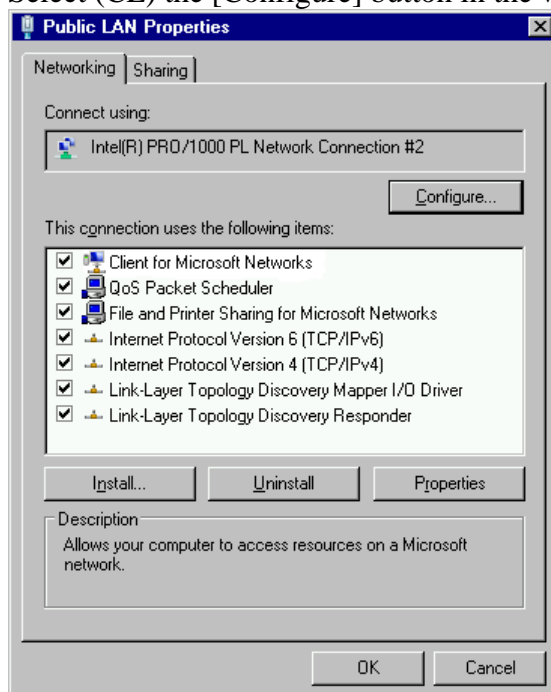
(a) Opening the Public LAN Properties window

Select (CL) [Public LAN Properties] in the 'Network Connections' window and select (CL) [Properties] by clicking the right mouse button.



(b) Opening the configuration windows

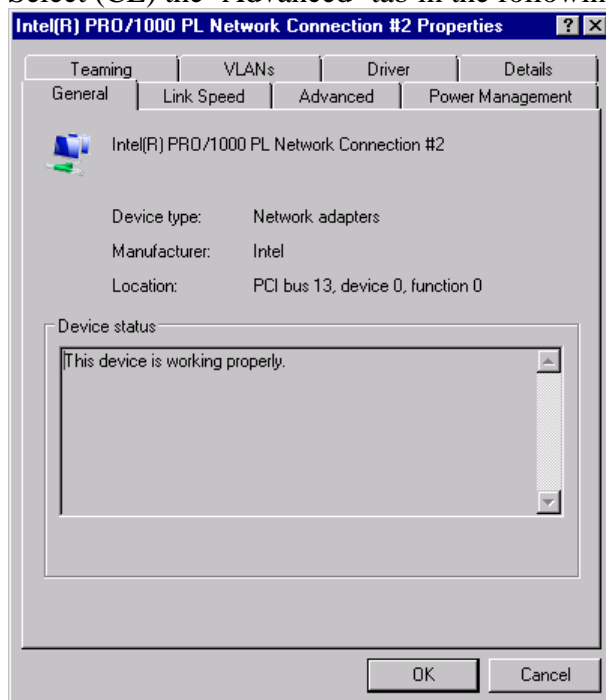
Select (CL) the [Configure] button in the window.



(c) Switching the tab

After the [Configure] button is pressed, the following window is displayed.

Select (CL) the 'Advanced' tab in the following window.

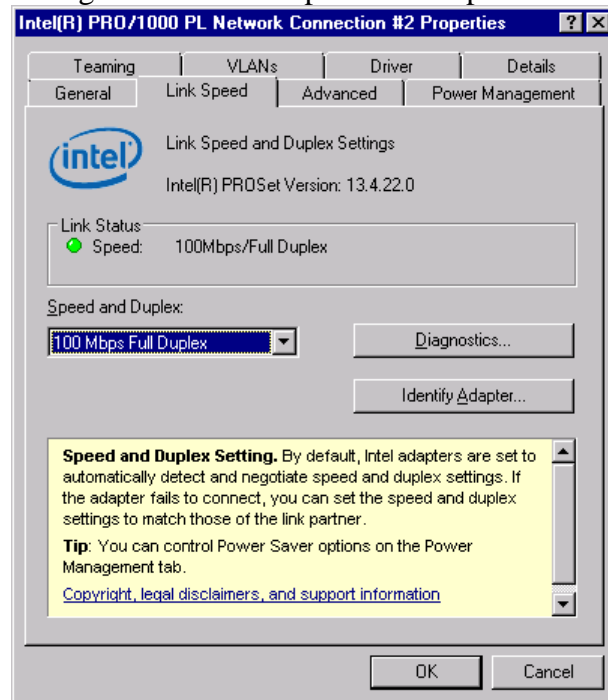


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(d) Setting the Connection Properties

After the 'Advanced' tab is selected, the following window is displayed.

Change the value of 'Speed and Duplex' from 'Auto Detect' to '100Mbps Full Duplex'.



(e) Applying the settings and closing the window

Return the window to 'Public LAN Properties' by pressing (CL) the [OK] button and close the window by pressing the [OK] button.

When you use Web Console only with the IPv6 connection, set it referring to [WEB08-10](#).

1.2 Check of Configuring Web Console over a Firewall

When you connect Web Console and the SVP over a firewall, make sure to connect them through the following TCP/IP port numbers to configure the firewall:

- FTP (File Transfer Protocol): 21 (TCP)
- HTTP (Hypertext Transfer Protocol): 80 (TCP)
- SNMP (Simple Network Management Protocol): 161 (UDP)
- HTTPs (Hypertext Transfer Protocol over Secure Socket Layer): 443 (TCP)
- RMI (Remote Method Invocation): 1099 (TCP)
- RMI: 51099 (TCP)
- RMI: 51100 (TCP)

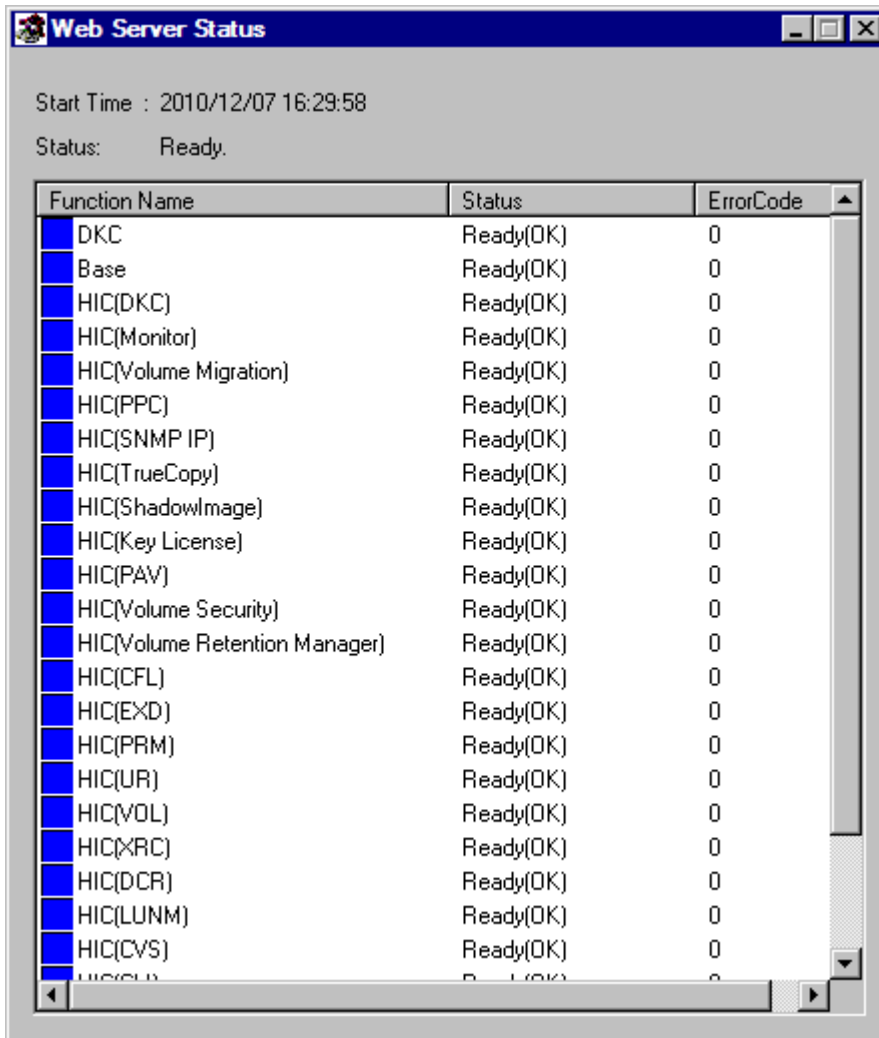
Notice: If the operating system of your Web Console computer is Windows Vista, you must configure a firewall so that Web Console and the SVP can communicate through these ports because Windows Vista uses a firewall by default.

2. Web Console

2.1 Specifications of Web Server Status

Activate RISMAN, which 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.

The window was always displayed as DKC460I. It does not usually displays as DKC510I/DKC610I/DKC710I. When the Web Server Status button of SVP launcher is pressed, the window as shown below displays.



Function Name	Status	ErrorCode
DKC	Ready(OK)	0
Base	Ready(OK)	0
HIC(DKC)	Ready(OK)	0
HIC(Monitor)	Ready(OK)	0
HIC[Volume Migration]	Ready(OK)	0
HIC(PPC)	Ready(OK)	0
HIC(SNMP IP)	Ready(OK)	0
HIC(TrueCopy)	Ready(OK)	0
HIC(ShadowImage)	Ready(OK)	0
HIC(Key License)	Ready(OK)	0
HIC(PAV)	Ready(OK)	0
HIC[Volume Security]	Ready(OK)	0
HIC[Volume Retention Manager]	Ready(OK)	0
HIC(CFL)	Ready(OK)	0
HIC(EXD)	Ready(OK)	0
HIC(PRM)	Ready(OK)	0
HIC(UR)	Ready(OK)	0
HIC(VOL)	Ready(OK)	0
HIC(XRC)	Ready(OK)	0
HIC(DCR)	Ready(OK)	0
HIC(LUNM)	Ready(OK)	0
HIC(CVS)	Ready(OK)	0
HIC(CLP)	Ready(OK)	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.)
- This window is started by pressing the “Web Server Status” button on the ‘SVP’ window.

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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 management of configuration information.	0002/0003
3	HIC(DKC)	Displays the state of initialization of the common function.	8005
4	HIC(Monitor)	Displays the state of initialization of the Performance Monitor function.	5105
5	HIC (Volume Migration)	Displays the state of initialization of the Volume Migration function.	5205
6	HIC(PPC)	Displays the state of initialization of the Server Priority Manager function.	5305
7	HIC(SNMP IP)	Displays the state of initialization of the SNMP Information function.	0305
8	HIC(TrueCopy)	Displays the state of initialization of the Remote Copy function.	6005/6105
9	HIC(ShadowImage)	Displays the state of initialization of the ShadowImage function.	7005/7105
10	HIC(Key Licence)	Displays the state of initialization of the Key License function.	0405
11	HIC(PAV)	Displays the state of initialization of the PAV function.	9005
12	HIC (Volume Security)	Displays the state of initialization of the Volume Security function.	9105
13	HIC(Volume Retention Manager)	Displays the state of initialization of the Volume Retention Manager z/OS® / Data Retention Utility function.	9205/9605
14	HIC(CFL)	Displays the state of initialization of Configuration File Loader function	8105
15	HIC(EXD)	Displays the state of initialization of Universal Volume Manager function.	0605
16	HIC(PRM)	Displays the state of initialization of Virtual Partition Manager function.	8505
17	HIC(UR)	Displays the state of initialization of the Universal Replicator function.	6505/6605
18	HIC(VOL)	Displays the state of initialization of the Quick Shadow / Dynamic Provisioning function.	3005
19	HIC(XRC)	Displays the state of initialization of the XRC function.	6805
20	HIC(DCR)	Displays the state of initialization of the Cache Residency Manager function.	4005
21	HIC(LUNM)	Displays the state of initialization of the LUN Manager function.	1005
22	HIC(CVS)	Displays the state of initialization of the Volume Manager function.	3305
23	HIC(CLI)	Displays the state of initialization of the Storage Navigator CLI function.	1305
24	HIC(MAL)	Displays the state of initialization of the E-Mail information function.	8605
25	HIC(MNT)	Displays the state of initialization of the Maintenance function.	8705
26	HIC(RPT)	Displays the state of initialization of the Report function.	8805
27	HIC(RSG)	Displays the state of initialization of the Resource Group function.	20705
28	HIC(SIM)	Displays the state of initialization of the SIM Syslog information function.	8905

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• 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) (*3)
8	Refresh(Error)	Red	Refreshment failed. (It is retried every other minute) (*1)
9	Initialize(Pause)	Yellow	Initialization temporarily stops. (*2)
10	Refresh(Pause)	Yellow	Refreshment temporarily stops. (*2)

Notes:

- Any of the statuses is Initialize(Stat) / Refresh(Start) / Initialize(Retry) / Refresh(Retry), no maintenance work can be done from an SVP. The message “INS2268E” is displayed on the SVP.
However, it changes to the state of Initialize(Pause) / Refresh(Pause) in about 10 seconds and the maintenance work on the SVP may be possible.
- 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.
- There is a possibility the configuration is being changed from a user application (RAID Manager etc.) other than Storage Navigator if the display of Initialize(Start) / Refresh(Start) remains as is for a while. It will turn into the state of Ready(OK) a while after the configuration change is completed performed from the user application.

- *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.
When DKC has been powered off, it is likely to turn into the state of xxxx(Error).
After DKC has been powered on for a while, it turns into the state of Ready(OK).
- *2 Initialization/Refresh is restarted by changing the SVP to the View mode.
- *3 When a storage system is ended without shutting down SVP, “Initialize(Error)” may be displayed at the time of initialization of RISMAN, a retry recovers.

- Error Code

When an error occurs, its error code 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

When SVP is logged in Remote Desktop, Web Console automatically starts up. Select [Maintenance]-[Maintenance Components] from the Action menu to start the maintenance screen.

The screenshot displays the Hitachi Storage Navigator Web Console interface. The top navigation bar includes 'File', 'Maintenance', 'Actions', 'Reports', and 'Settings'. The 'Maintenance' menu is expanded, showing 'Maintenance Components (General)' and 'Storage'. The 'Storage' menu is further expanded, showing 'RAID600(S/N: 64559)'. The main content area displays the 'Hardware Summary' for the selected system, including details like Storage System Name, Type, S/N, IP Address, and Total Cache Size. Below this, the 'Allocation Summary' is shown, featuring a pie chart for Drive Capacity and a table for Allocation details.

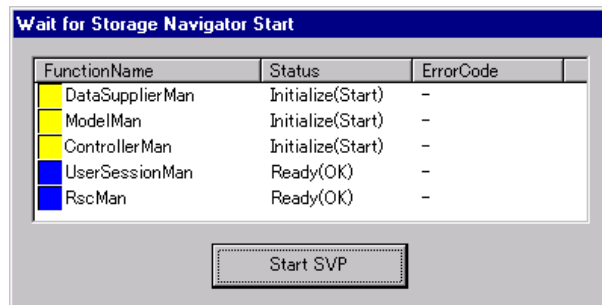
Hardware Summary

Storage System Name	RAID600	Microcode Version	Main	70-00-06-00/E1
Storage System Type	RAID600	SVP		70-00-05/00
Full S/N	64559	RMI Server		06_01_00
IP Address	localhost	Total Cache Size		24.00GB
Contact				
Location				

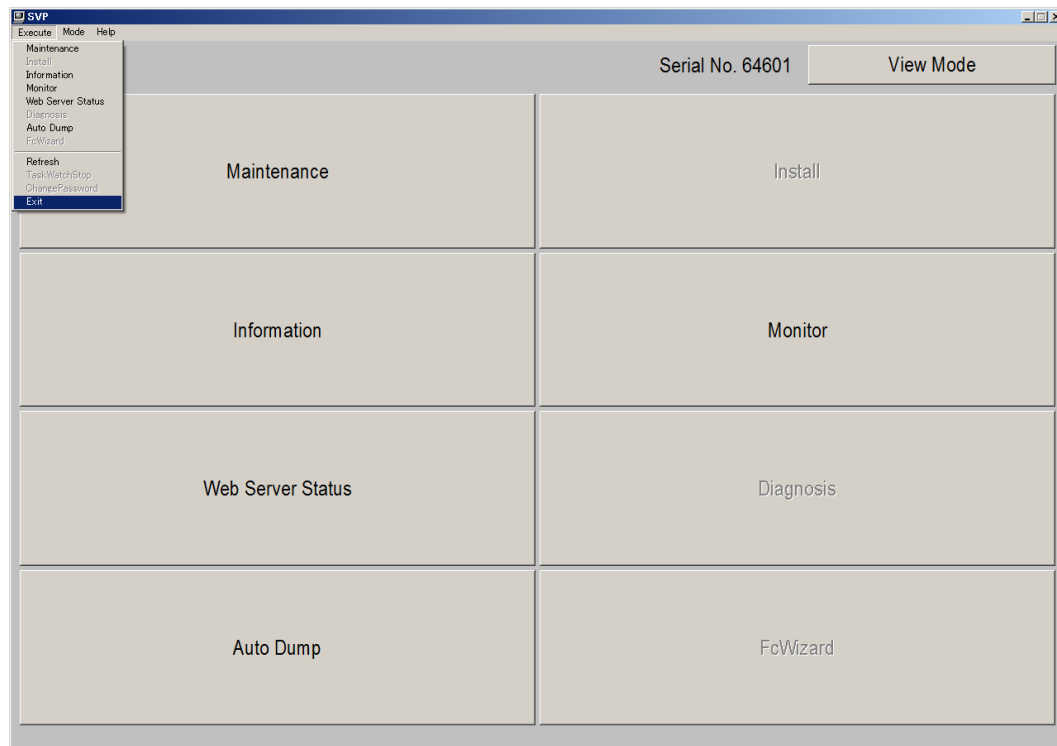
Allocation Summary

Internal/External	Total	System Type	Total	Number of LDEVs	Allocated (Excluding V-VOL)	3442
Drive Capacity						
Allocated (Excluding V-VOL)	2.71TB [19%]					
Unallocated (Excluding V-VOL)	8.12TB [59%]					5340
Reserved						
Used THP Pool	- [-%]					
Unused THP Pool	- [-%]					
Other	- [-%]					
Free	2.93TB [22%]					
Total	13.77TB					8782

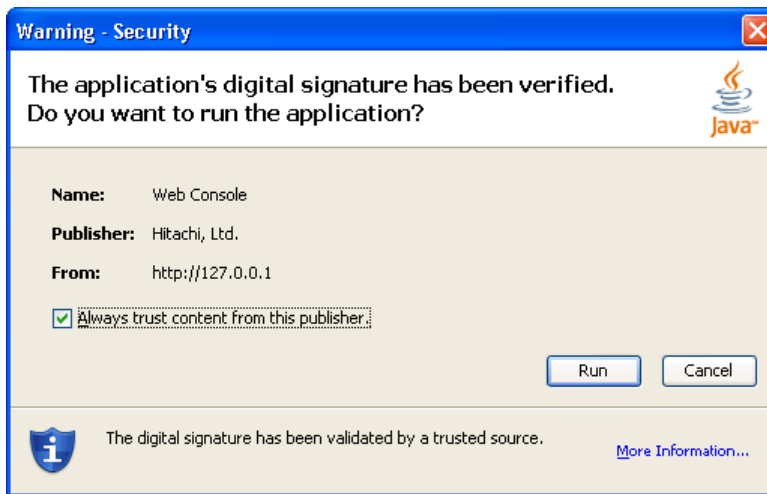
- *: When Web Console is not ready, the screen below is displayed. Selecting (CL) [Start SVP] will start the maintenance screen.



- *: Just after the microcode updates, the maintenance screen starts without the main window of Web Console. If the maintenance screen is closed, the main window of Web Console starts automatically (If Web Console is not ready, the above screen appears until it is ready). If you select (CL) the [Start SVP] button, the maintenance screen starts. When you close the maintenance screen, the main window of Web Console starts automatically. If you want to close the maintenance screen, change [View Mode] to [Modify Mode] and then select (CL) [Execute]-[Exit].



If the security warning as shown in the following figure is displayed, select (CL) [Run].



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.

If the screen below is displayed, select (CL) [Allow].



2.3 Specifications Common to Functions of Web Console

Refer to “Hitachi Storage Navigator User Guide” for the specification of the commonness part of Web Console.

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

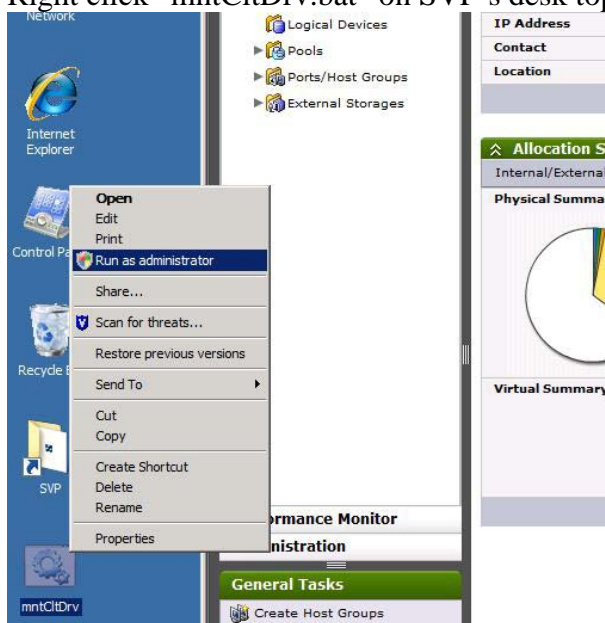
The operation of Web Console is similar to the operation of Storage Navigator. Refer to Storage Navigator Conventions of “Hitachi Storage Navigator User Guide”.

2.4.1 How to use client PC's directory

If you use client PC's directory, following this procedure. When client PC's directory configuration is changed, you should execute again

- Installing License Key
- Downloading Audit Log
- Downloading Reports
- Exporting displayed information etc.

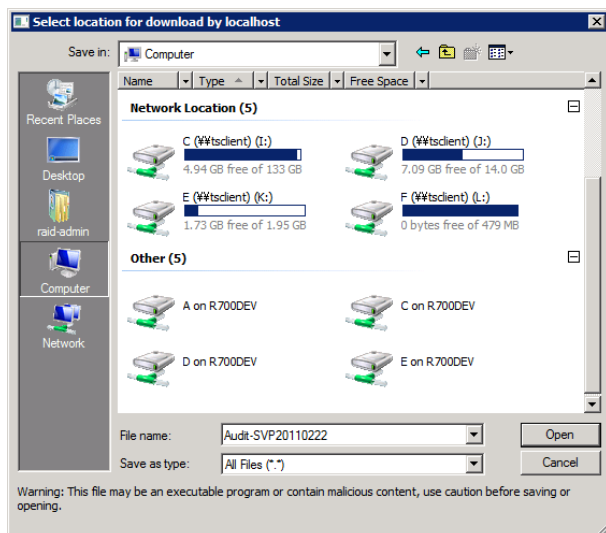
1. If you use storage media like a USB memory, insert it to client PC in advance.
2. Right click “mntClcDrv.bat” on SVP's desk top, select [Run as Administrator].



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Mounted Client PC's directory is displayed like "C (\\TSCLIENT) (i:)" on the file chooser of Web Console.

Note: It's impossible to use "C on {Client PC's name}".



2.4.2 Auto Account Lock

Two functions are available to avoid brute force attacks on user names and passwords. One of them locks the user account for a given length of time, and the other disables the user account.

(1) Account lock function

When user login fails for a certain number of times in a row, the function locks the user account for a given length of time.

(2) Account disabling function

When user login fails for the specified number of times in a row, the function disables the user account.

Note: If all accounts registered to SVP are disabled, you cannot log into SVP (Authentication can be done in the authentication server).

Prevent all accounts from being disabled.

For how to change to the function that disables user accounts and to change back to the function that locks user accounts, see the INSTALLATION SECTION, “5.5 Switch the Auto Account Lock Function” ([INST05-1680](#)).

2.5 Actions to Be Taken According to Result of Troubleshooting

Refer to Troubleshooting of “Hitachi Storage Navigator User Guide”.

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

	Failure	Recovery action	Remarks
1	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)
		The versions of Apache and SVP may mismatch. Uninstall Apache and install it again. Refer to the installation procedure of Apache in the WEB CONSOLE section for the installation procedure.	
		Since the Web Console program different from the microprogram version may be started, you need to clear the cache of Java. Select [Start]–[Control Panel], open the control panel, start the control panel of Java, and clear the cache file.	
2	The Storage Navigator PC experiences an error (10,6027), when accessing the SVP from the Storage Navigator PC.	<p>SVP (a Web server) cannot recognize an IP address of Storage Navigator PC or HUB, and please confirm a following item, and Fig 2.5-1 is reference.</p> <p>(1) Took off an external LAN cable of SVP by installation work or maintenance work, and does not restart do SVP?.</p> <p>(2) Do not do restart of SVP by an Off state with a power supply of LAN machinery (HUB/router) connected to external LAN of SVP with installation work or maintenance work?</p> <p>In case of above, connect external LAN cable of SVP, and please turn a power supply of LAN machinery (HUB/router) into an On state as well, and restart SVP, and please access from Storage Navigator movement PC SVP (a Web server) from it once again.</p>	
3	The wrong information is displayed on Storage Navigator regarding a product name, a vender name and a function name, etc.	Select [Start]–[Control Panel] on Web Console, and then restart SVP.	
4	Web Console doesn't start even if SVP is logged in remote desktop.	<p>Web Console doesn't occasionally start while changing the subsystem configuration until the change ends.</p> <p>Please wait until the change ends.</p> <p>Please confirm whether the subsystem is operated from RAID Manager etc. when Web Console do not start for a long time.</p>	

(To be continued)

(Continued from the preceding page)

	Failure	Recovery action	Remarks
5	The (20121 107024) error occurred on the main window of Storage Navigator on SVP.	Please respond to the message, and exit the Storage Navigator main window.	
6	After the (20121 107024) error occurs on the main window of Storage Navigator on SVP, the (20121 107025) error is repeatedly displayed.	Please exit the Storage Navigator main window by pressing [Alt] and [F4] key.	
7	It's impossible to use client PC's directory if SVP is logged in remote desktop. <ul style="list-style-type: none"> • Installing License Key • Downloading Audit Log • Downloading Reports • Exporting displayed information etc. 	Please use SVP's directory to import or export files. If you install license key, please move license key's file to SVP's directory and use the file for installing. if you download a file, please download to SVP's directory and move the file for need.	
8	The (20121 107096) error occurs repeatedly on the main window of Storage Navigator on SVP.	Please exit the Storage Navigator main window by pressing [Alt] and [F4] keys.	
9	About a remote desktop connection to SVP, if Client PC OS is Windows XP (SP3), the file will be destroyed when copying a file from SVP onto client.	This is a known problem in Windows. Please deal according to the content described in following URL. http://support.microsoft.com/kb/972828	
10	After a remote desktop connection to SVP is established, an error code is displayed in the 'Wait for Storage Navigator Start' window.	See the "Storage Navigator Messages manual" and take the necessary action.	
11	Version update notification dialog of Java and Flash Player is popup.	Don't update Java and Flash Player. If Java and Flash Player is updated, SVP authentication and Storage Navigator function will not work fine.	

When restart SVP by the state that LAN between SVP and Web Console is not connected to justly, there is the case that gets impossible to start Web Console ((10,6027) error occurred).

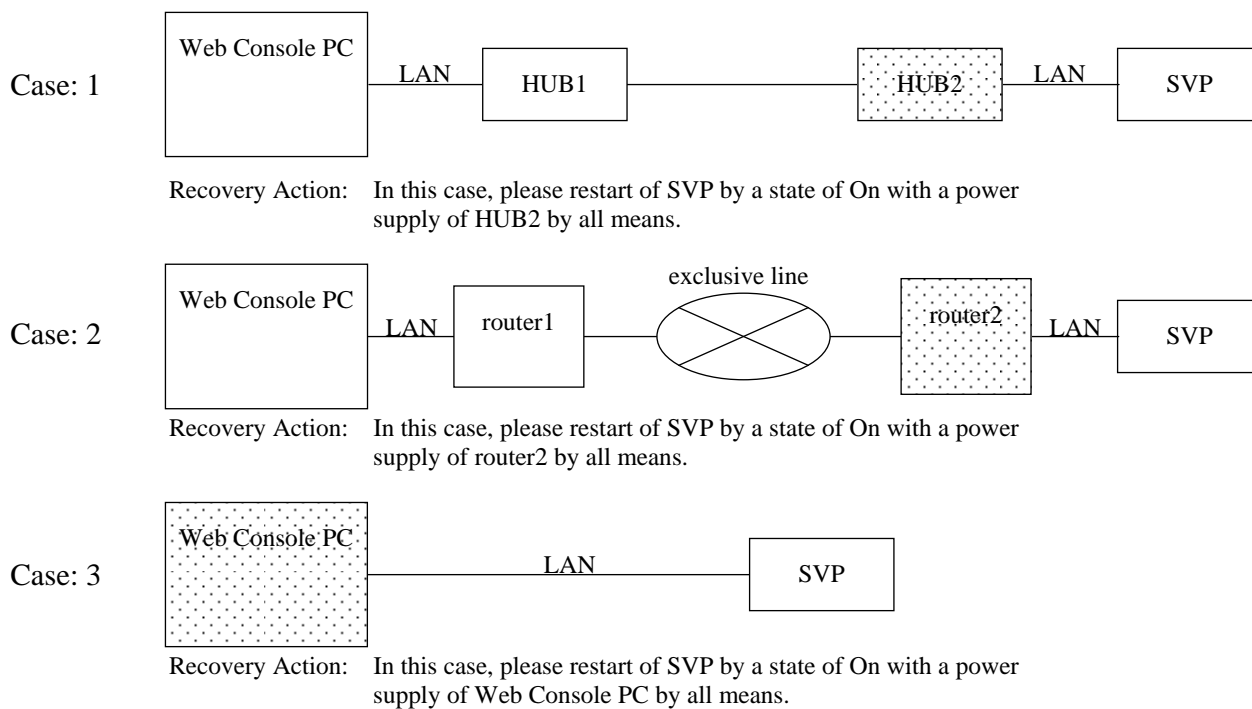


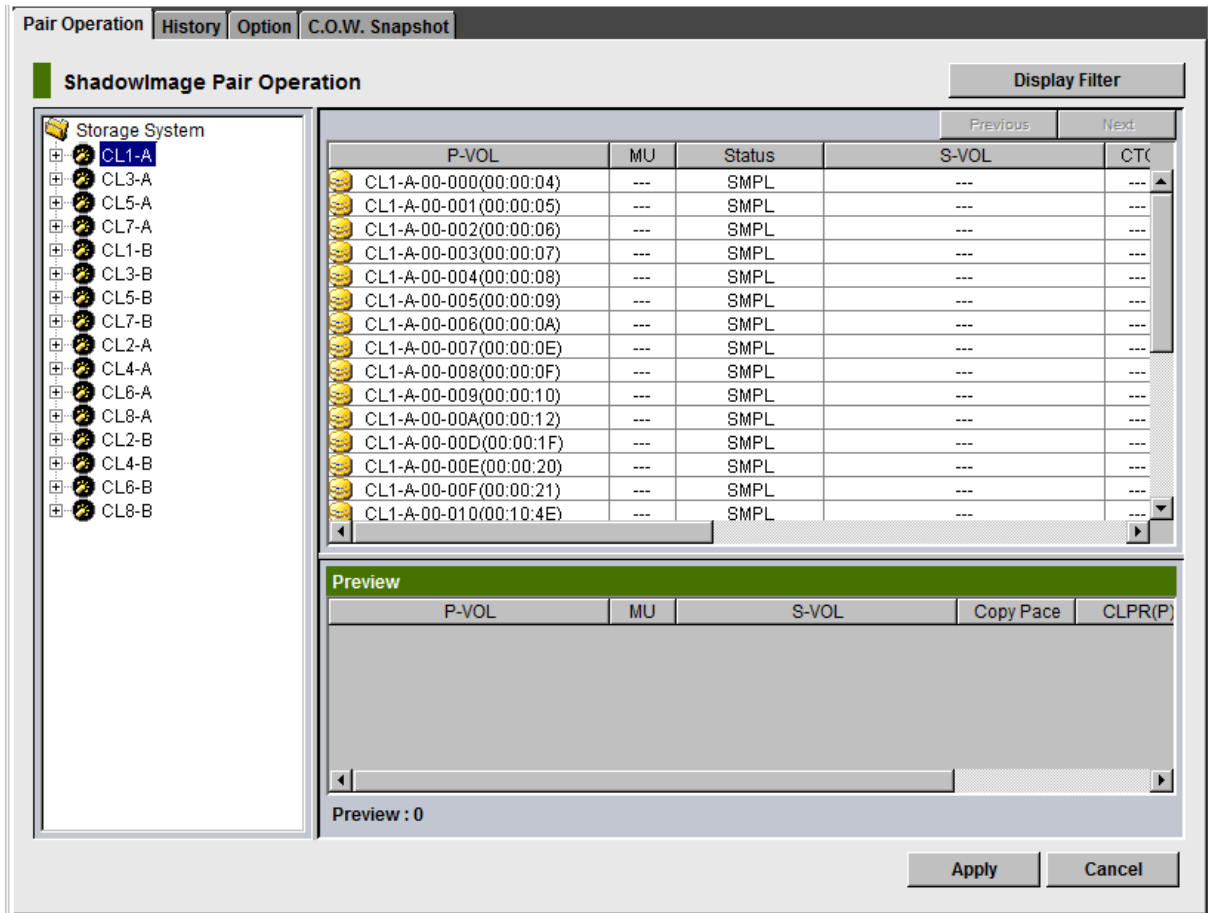
Fig. 2.5-1 Connection Example of LAN

3. Difference from the P.P Manual

3.1 ShadowImage

Select (CL) [Actions] at the top of the main window.

Select (CL) [Local Copy]-[ShadowImage/Copy-on-Write Snapshot]-[Pair Operation] to open the ShadowImage window.



(1) Preview box

The [Initialize] button is displayed in the Preview box.

- Initialize

It deletes all the pairs that have been formed by ShadowImage / ShadowImage for Mainframe / Volume Migration / FlashCopy (R) V2 / FlashCopy (R) SE / Copy-on-Write Snapshot / Thin Image and sets the pair status of the volume to SMPL (to Simplex, in the case of ShadowImage for Mainframe). And the pool of Copy-on-Write Snapshot is blocked.

Refer to the TROUBLE SHOOTING SECTION “8.6 ShadowImage Initialize procedure” for the Initialize procedure and notes.

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

- Note 1: When the [Initialize] button is pressed, not only pairs formed by ShadowImage, but also pairs formed by ShadowImage for Mainframe / Volume Migration / FlashCopy (R) V2 / FlashCopy (R) SE / Copy-on-Write Snapshot / Thin Image are deleted. And the pool of Copy-on-Write Snapshot is blockaded.
- Note 2: Please restore the pool of Copy-on-Write Snapshot blockaded, according to “Copy-on-Write Snapshot User Guide”.
- Note 3: Perform the operation only when it is directed by the Technical Support Division.

3.2 ShadowImage for Mainframe

Select (CL) [Actions] at the top of the main window.

Select (CL) [Actions]-[Local Copy]-[ShadowImage for Mainframe/Compatible FlashCopy (R) V2/Compatible FlashCopy (R) SE]-[Pair Operation] at the top of the window to activate.

ShadowImage for Mainframe Pair Operation

Storage System
 LDKC : 00
 CU Gr.(00-10)

S-VOL	Status	T-VOL	Copy Pace	Sync.	Emulation
00:00:00	Simplex	---	---	---	3390-3
00:00:01	Simplex	---	---	---	3390-3
00:00:02	Simplex	---	---	---	3390-3
00:00:03	Simplex	---	---	---	3390-3
00:00:04	Simplex	---	---	---	3390-3
00:00:05	Simplex	---	---	---	3390-3
00:00:06	Simplex	---	---	---	3390-3
00:00:07	Simplex	---	---	---	3390-3
00:00:08	Simplex	---	---	---	3390-3
00:00:09	Simplex	---	---	---	3390-3
00:00:0A	Simplex	---	---	---	3390-3
00:00:0B	Simplex	---	---	---	3390-3
00:00:0C	Simplex	---	---	---	3390-3
00:00:0D	Simplex	---	---	---	3390-3
00:00:0E	Simplex	---	---	---	3390-3

Preview

S-VOL	T-VOL	Copy Pace	CLPR(S)	CLPR(T)	Error Code

Preview : 0 Initialize

Apply Cancel

(1) Preview box

The [Initialize] button is displayed in the Preview box.

- Initialize

It deletes all the pairs that have been formed by ShadowImage / ShadowImage for Mainframe / Volume Migration / FlashCopy (R) V2 / FlashCopy (R) SE / Copy-on-Write Snapshot / Thin Image and sets the pair status of the volume to Simplex (to SMPL, in the case of ShadowImage). And the pool of Copy-on-Write Snapshot is blocked.

Refer to the TROUBLE SHOOTING SECTION “8.6 ShadowImage Initialize procedure” for the Initialize procedure and notes.

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

- Note 1: When the [Initialize] button is pressed, not only pairs formed by ShadowImage for Mainframe, but also pairs formed by ShadowImage / Volume Migration / FlashCopy (R) V2 / FlashCopy (R) SE / Copy-on-Write Snapshot / Thin Image are deleted. And the pool of Copy-on-Write Snapshot is blockaded.
- Note 2: Please restore the pool of Copy-on-Write Snapshot blockaded, according to “Copy-on-Write Snapshot User Guide”.
- Note 3: Perform the operation only when it is directed by the Technical Support Division.

3.2.1 Split Volume Pair window

Select (CL) [Actions]-[Local Copy]-[ShadowImage for Mainframe/Compatible FlashCopy (R) V2/Compatible FlashCopy (R) SE]-[Pair Operation] at the top of the window to activate.

Select (CL) [Pair Operation] at the top of the ShadowImage for Mainframe window.

Right-click a volume in Duplex status and select [Split Volume Pair].

(The [Split Volume Pair] is available only when a volume in duplex status exists.)

Hitachi Storage Navigator

Split Volume Pair

S-VOL	Status	T-VOL	Emulation	Capacity(Cyl)	CLPR(S)	CLPR(T)
00:FE:01	Duplex	00:FE:04	3390-3	100	00:CLPR0	00:CLPR0

Copy Pace: Medium

Select Split Type: Migration

Select T-VOL

LDKC: 00

CU: FE

Volume Type

☒ Internal VOL

☐ External VOL

Attribute

☒ Reserved

☒ Not Reserved

Volume	Emulation	Capacity(Cyl)	CLPR
00:FE:00	3390-3	100	00:CLPR0
00:FE:02	3390-3	100	00:CLPR0
00:FE:05	3390-3	100	00:CLPR0
00:FE:07	3390-3	100	00:CLPR0
00:FE:08	3390-3	100	00:CLPR0
00:FE:09	3390-3	100	00:CLPR0
00:FE:0A	3390-3	100	00:CLPR0
00:FE:0B	3390-3	100	00:CLPR0
00:FE:0C	3390-3	100	00:CLPR0

Buttons: Set, Change, OK, Cancel

- (1) [Select Split Type] drop-down list

Select migration VOL and open the 'Split Volume Pair' window.

The [Select Split Type] drop-down list is fixed in [Migration].

- Migration (split type)

Split pair operation by Migration is split type for exclusive use of Migration VOL.

It execute data migration by the migration VOL.

- (2) [Volume Type] box

When [Migration] of the [Select Split Type] drop-down list is selected, you don't select the [External VOL] check box.

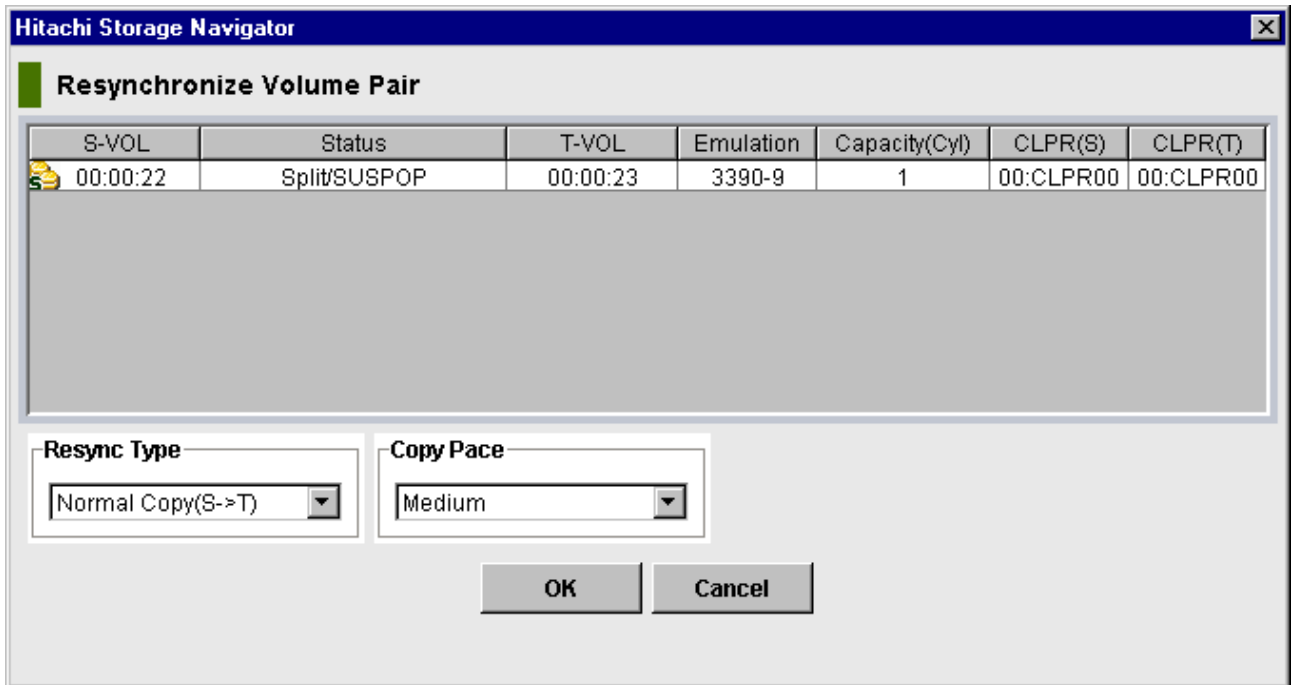
WEB03-60**3.2.2 Resynchronize Volume Pair window**

Select (CL) [Actions]-[Local Copy]-[ShadowImage for Mainframe/Compatible FlashCopy (R) V2/Compatible FlashCopy (R) SE]-[Pair Operation] at the top of the window to activate.

Select (CL) [Pair Operation] at the top of the ShadowImage for Mainframe window

Right-click a volume in Suspend status and select [Resynchronize Volume Pair]

(The [Resynchronize Volume Pair] is available only when a volume of Suspend status exists.)



(1) [Resync Type] drop-down list

Select Migration VOL and open the 'Resynchronize Volume Pair' window.

The [Resync Type] drop-down list is fixed in [Migration(S->T)].

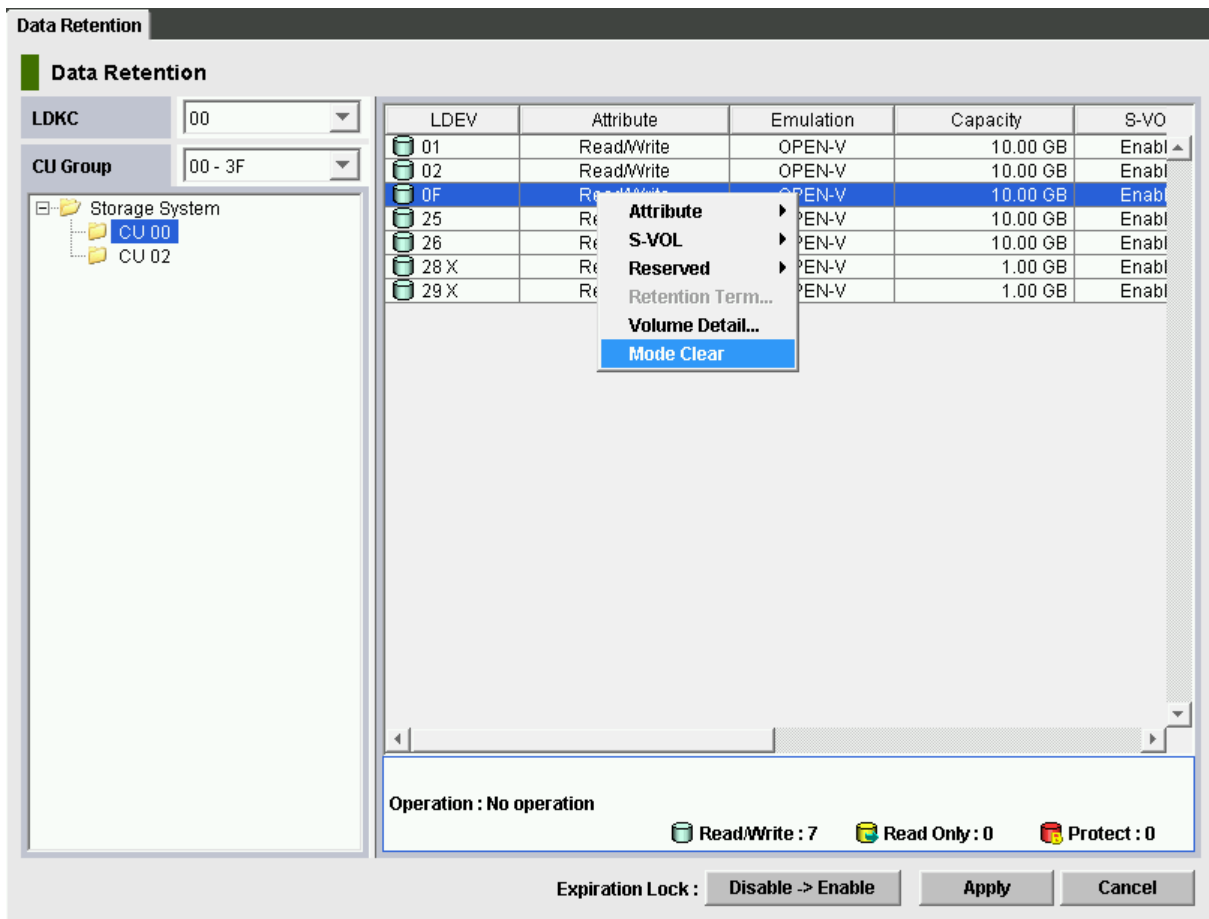
- Migration(S->T)

Resynchronize pair operation by Migration is Resynchronize Type for exclusive use of Migration VOL. The copy direction for a normal resync operation is S-VOL to T-VOL, with data migration by the migration VOL.

Blank Sheet

3.3 Data Retention Utility

Select (CL) [Actions]-[Other Function]-[Data Retention].



(1) Canceling the mode attribute

When the 'Data Retention' window from [Actions]-[Other Function]-[Data Retention] menu of Web Console is opened and the operation for changing the access attribute is performed, [Mode Clear] is displayed in a pop-up menu.

Use the menu when you want to cancel the attribute, Zer and Inv.

Note: For the attributes, Zer and Inv, refer to "Provisioning Guide for Open Systems".

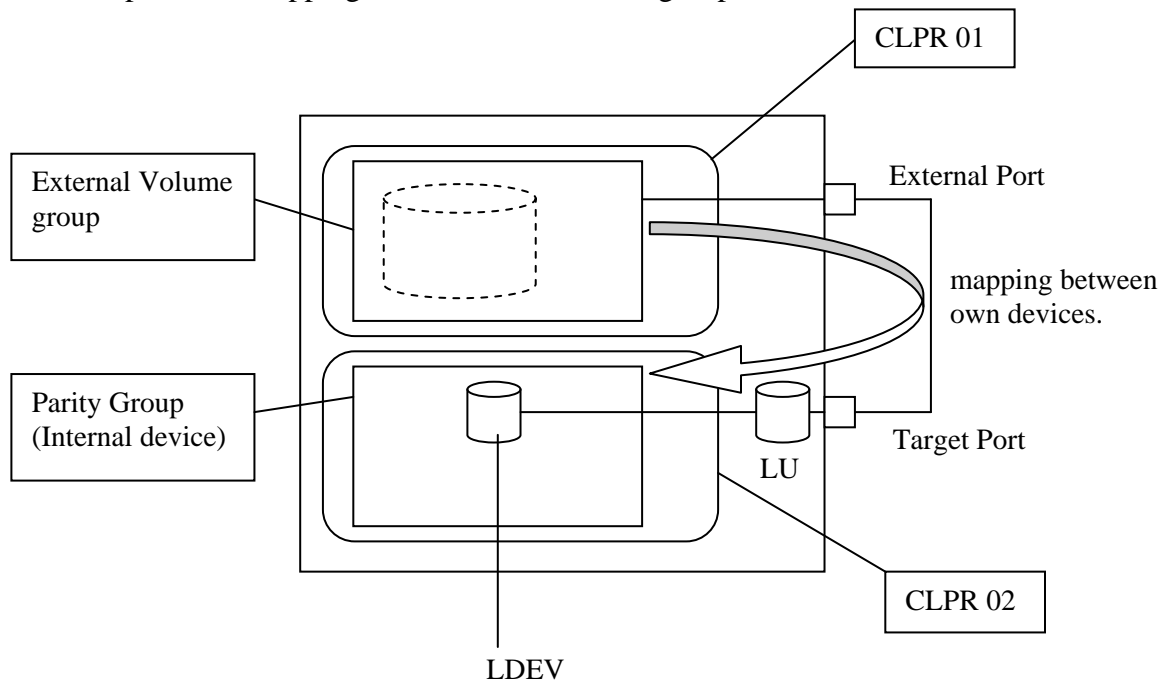
3.4 Universal Volume Manager

3.4.1 Mapping its own volumes

Provided that the External Volume is its own volume, it allows to be mapped as an external storage device. But every LDEV of the external group must be allocated to another CLPR that is different from one which is allocated to some internal LDEVs.

It is shown for example when mapping between own LU and own external group as following.

For example when mapping between own external group



3.4.2 Previous arrangement for mapping its own volumes

The procedure for mapping its own volumes is described below:

1. Login to SVP.
2. Select (CL) [Storage Systems]-[External Storage] on the web console.
3. Confirm [External Storage Systems] tab is selected.
Then select (CL) [More Actions]-[Edit Policies].

Edit Policies

Set values for External Volume Setting and click Apply.

Allow Simultaneous Creation of LDEVs: ☒ Yes ☐ No

Use External Storage System Configuration: ☒ Yes ☐ No

Base Emulation Type: Depend on the selected external volume(s)

Number of LDEVs per External Volume: 1
(1)

Cache Partition: 00:CLPRO

Cache Mode: ☐ Enable ☒ Disable

Inflow Control: ☐ Enable ☒ Disable

Processor Blade: MPB1

Internal Volume Usage: ☐ Enable ☒ Disable

Apply Cancel Help

4. Select (CL) [Enable] on [Internal Volume Usage] item, then select (CL) [Apply].

3.4.3 Note for mapping its own volumes

Mapping its own volumes could be done by SVP only.

The external volumes are available for data migration only.

3.5 Storage Navigator CLI

When using Storage Navigator CLI, open the command prompt window to operate as follows.
[Start]-[All Programs]-[Accessories]-[Command Prompt]

Move the current directory to c:\dkc200\CFLCLITool as follows.

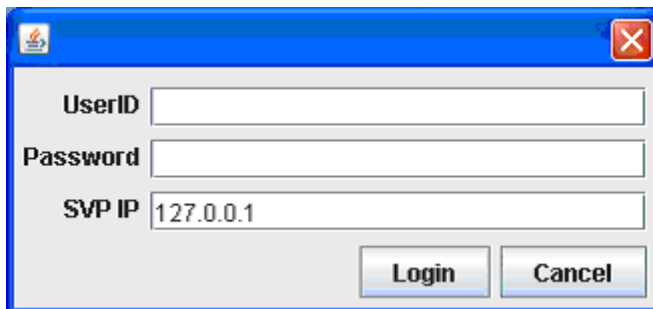
```
cd c:\dkc200\CFLCLITool
```

Syntax for each command is as following.

- In case of CFLSET
cfl CFLSET input-file-name output-file-name
- In case of CFLCHK
cfl CFLCHK input-file-name output-file-name
- In case of CFLGET
cfl CFLGET input-file-name output-file-directory

After typing the cfl command, the following dialog window appears.

And then enter UserID and Password. SVP IP should not be changed. Keep the default value (127.0.0.1).

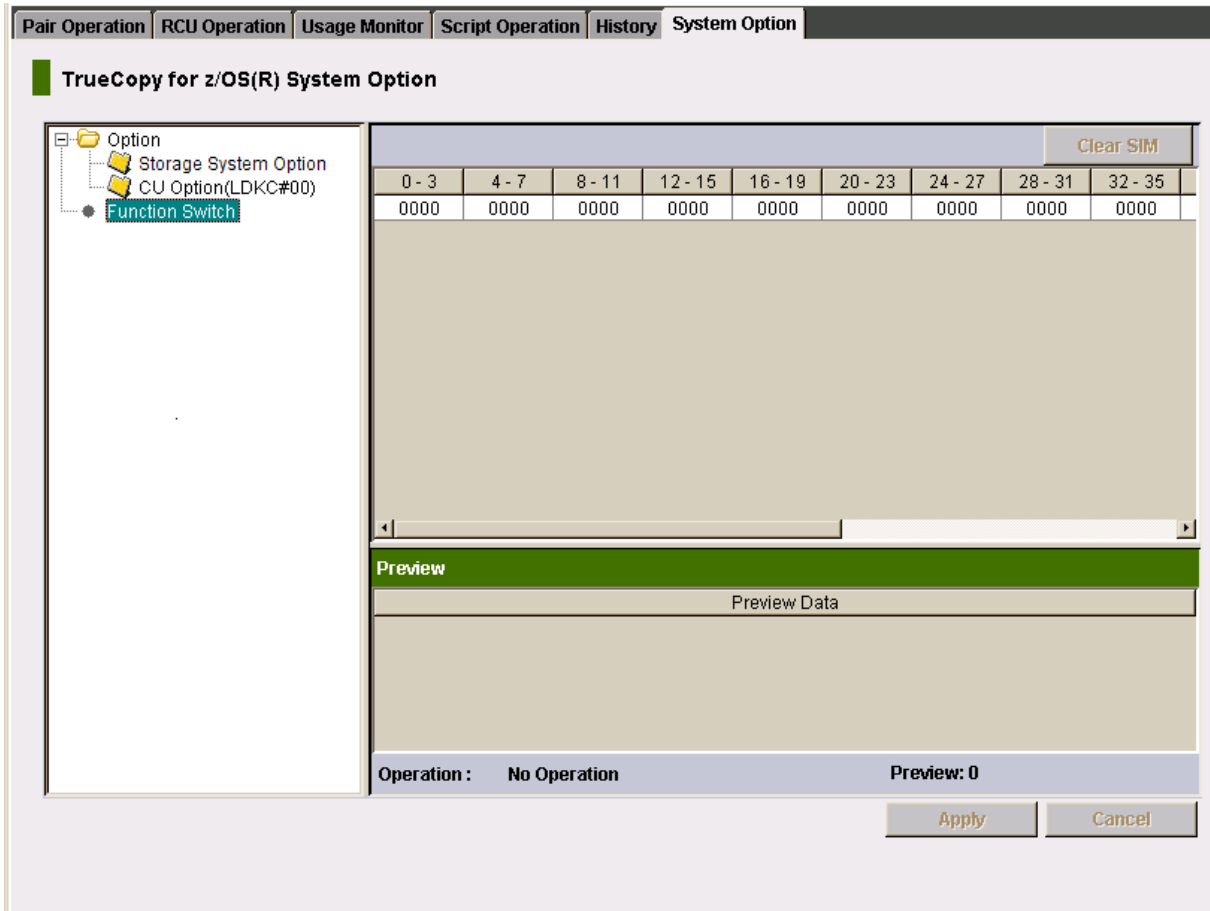


Refer to “Hitachi Storage Navigator User Guide” regarding the way to use the CFLSET/ CFLCHK/ CFLGET commands in detail.

3.6 TrueCopy for Mainframe

Select (CL) [Actions] menu at the top of the Storage Navigator main window.

Select (CL) [Remote Copy]-[TrueCopy for Mainframe]-[Pair Operation] to open the TrueCopy for Mainframe window.



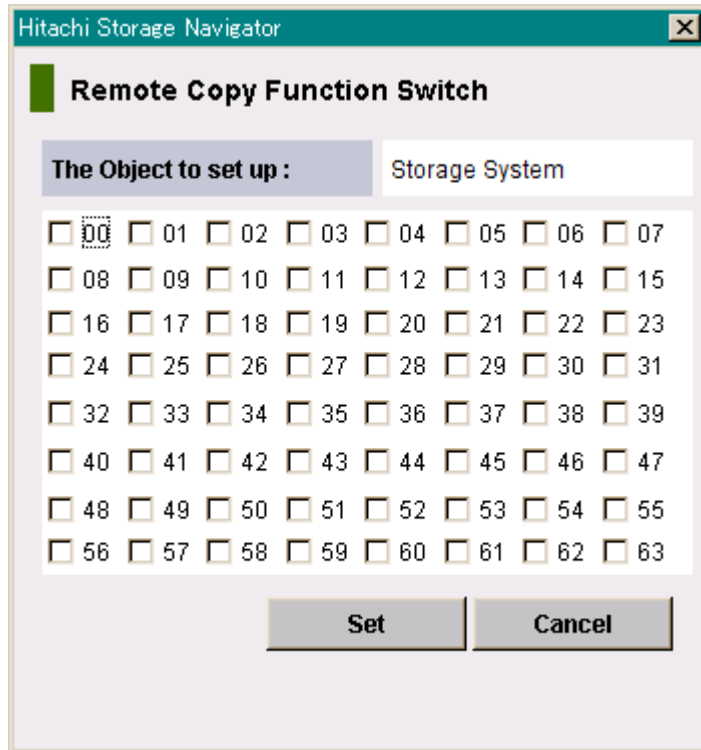
(1) System Option

The [Function Switch] node appears in the tree of the System Option tab.

- Function Switch

The display of the list changes as shown in the above figure when the [Function Switch] node is selected.

Select the list and click the right mouse button, then [Function Switch] menu is displayed. Select the [Function Switch] menu, then [Remote Copy Function Switch] dialog appears.



The dialog box titled "Hitachi Storage Navigator" contains a section "Remote Copy Function Switch". Below this, there are two tabs: "The Object to set up :" and "Storage System". The "The Object to set up :" tab is active, showing a grid of 64 checkboxes numbered 00 to 63. The checkbox for 00 is checked. At the bottom of the dialog, there are two buttons: "Set" and "Cancel".

The Object to set up :							
<input checked="" type="checkbox"/> 00	<input type="checkbox"/> 01	<input type="checkbox"/> 02	<input type="checkbox"/> 03	<input type="checkbox"/> 04	<input type="checkbox"/> 05	<input type="checkbox"/> 06	<input type="checkbox"/> 07
<input type="checkbox"/> 08	<input type="checkbox"/> 09	<input type="checkbox"/> 10	<input type="checkbox"/> 11	<input type="checkbox"/> 12	<input type="checkbox"/> 13	<input type="checkbox"/> 14	<input type="checkbox"/> 15
<input type="checkbox"/> 16	<input type="checkbox"/> 17	<input type="checkbox"/> 18	<input type="checkbox"/> 19	<input type="checkbox"/> 20	<input type="checkbox"/> 21	<input type="checkbox"/> 22	<input type="checkbox"/> 23
<input type="checkbox"/> 24	<input type="checkbox"/> 25	<input type="checkbox"/> 26	<input type="checkbox"/> 27	<input type="checkbox"/> 28	<input type="checkbox"/> 29	<input type="checkbox"/> 30	<input type="checkbox"/> 31
<input type="checkbox"/> 32	<input type="checkbox"/> 33	<input type="checkbox"/> 34	<input type="checkbox"/> 35	<input type="checkbox"/> 36	<input type="checkbox"/> 37	<input type="checkbox"/> 38	<input type="checkbox"/> 39
<input type="checkbox"/> 40	<input type="checkbox"/> 41	<input type="checkbox"/> 42	<input type="checkbox"/> 43	<input type="checkbox"/> 44	<input type="checkbox"/> 45	<input type="checkbox"/> 46	<input type="checkbox"/> 47
<input type="checkbox"/> 48	<input type="checkbox"/> 49	<input type="checkbox"/> 50	<input type="checkbox"/> 51	<input type="checkbox"/> 52	<input type="checkbox"/> 53	<input type="checkbox"/> 54	<input type="checkbox"/> 55
<input type="checkbox"/> 56	<input type="checkbox"/> 57	<input type="checkbox"/> 58	<input type="checkbox"/> 59	<input type="checkbox"/> 60	<input type="checkbox"/> 61	<input type="checkbox"/> 62	<input type="checkbox"/> 63

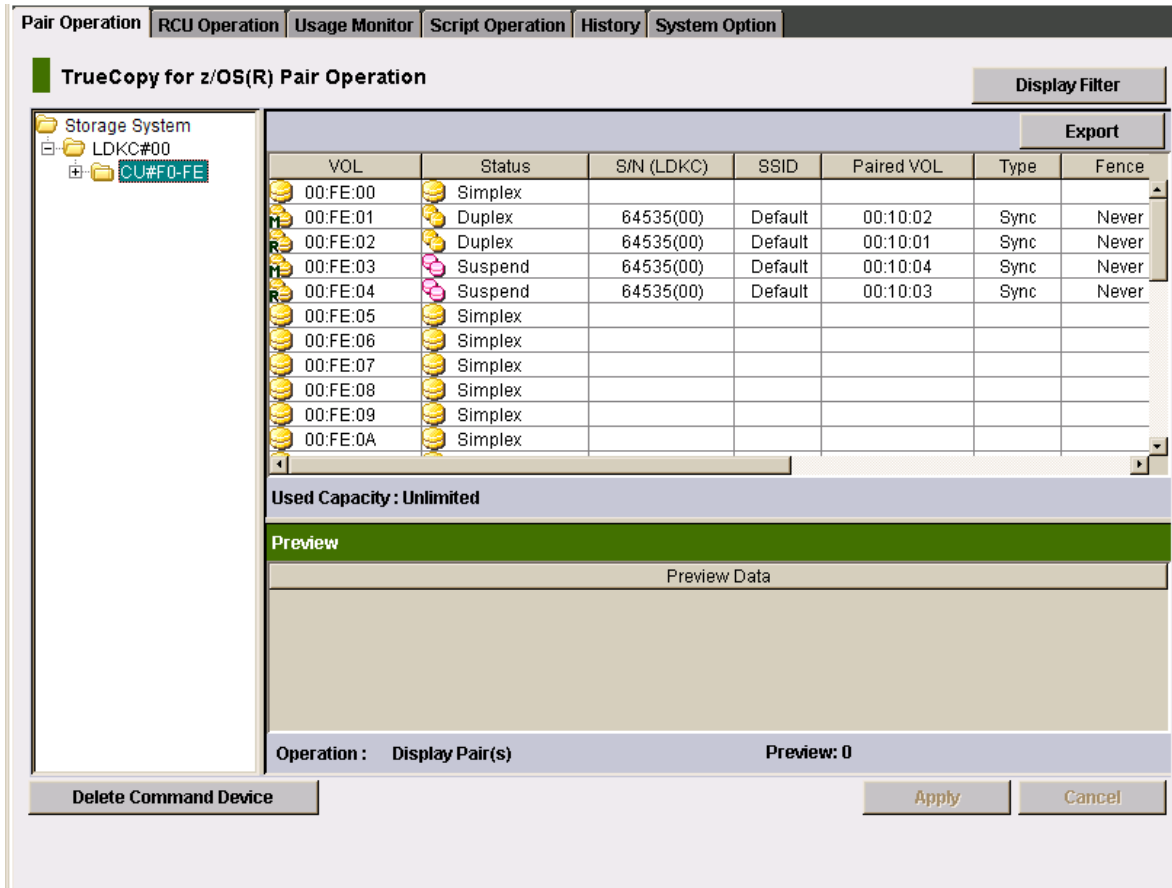
Set Cancel

Make the check box turn on or turn off, and select (CL) the [Set] button.

Confirm the content of the Preview box, and select (CL) the [Apply] button.

Note: Perform the operation only when it is directed by the Technical Support Division.

Note: Please refer to "3.8 Remote Copy Function Switch" ([WEB03-160](#)) for the function allocated in each switch.



(2) Pair Operations

The [Delete Command Device] button is appeared in this window.

- Delete Command Device

The command device for Business Continuity Manager is deleted in the lump.

Use the button when you want to delete command device for Business Continuity Manager after removed the Business Continuity Manager.

Note1: Command devices for Business Continuity Manager are deleted by this operation.

But when external volumes used by Universal Volume Manager are defined as command devices, they are not deleted.

Note2: No information is displayed in the Preview box when click the [Delete Command Device] button. Click the [Apply] button if “Delete Command Device” is displayed in the “Operation:”.

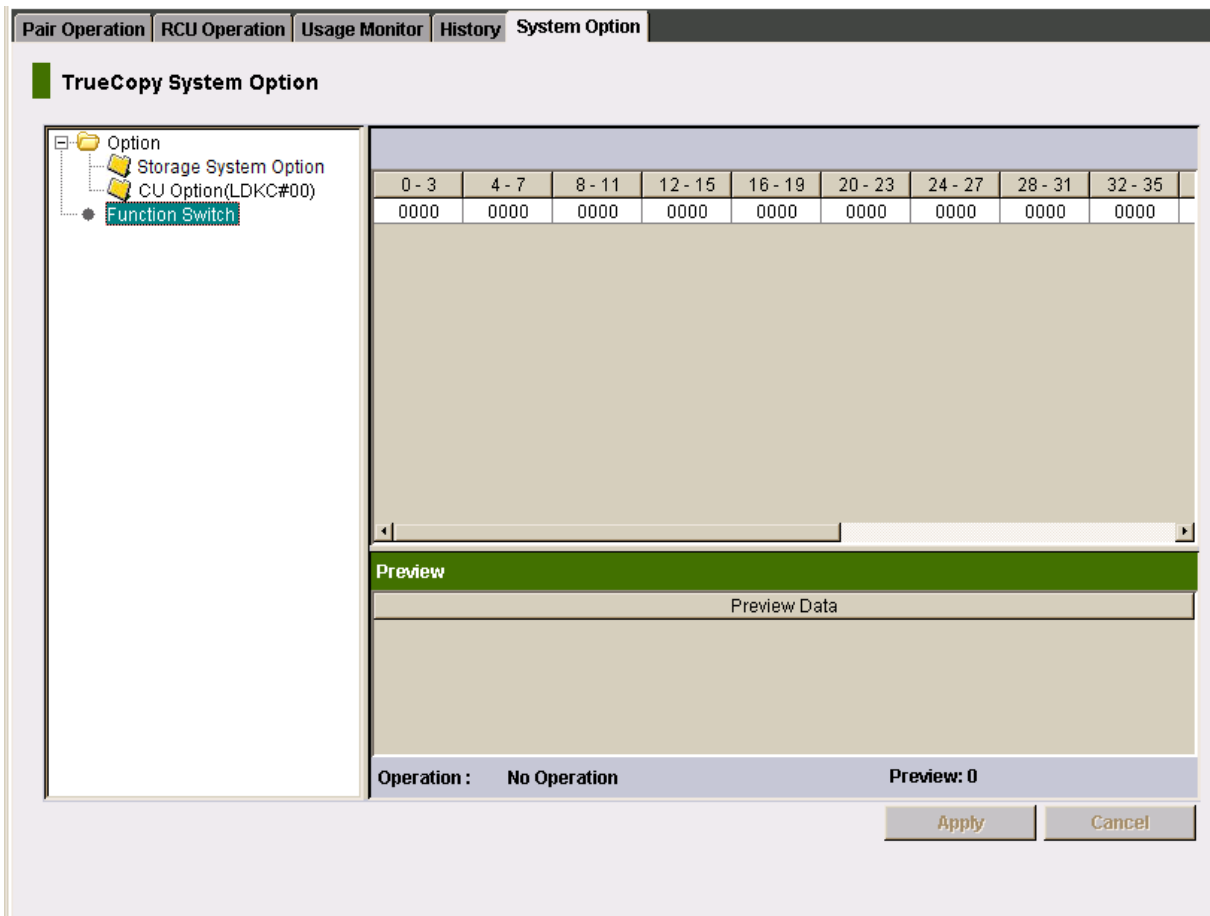
Note3: To find the command device for Business Continuity Manager, use the Basic Information Display. The ‘TrueCopy for Mainframe’ window cannot find the command device for Business Continuity Manager. For more information about the Basic Information Display, see “Hitachi Storage Navigator User Guide”.

Note4: By this operation, when Command devices for Business Continuity Manager are deleted, confirm that Shared memory which is required in TrueCopy for Mainframe has been installed.

3.7 TrueCopy

Select (CL) [Actions] menu at the top of the Storage Navigator main window.

Select (CL) [Remote Copy]-[TrueCopy]-[Pair Operation] to open the TrueCopy window.



(1) System Option

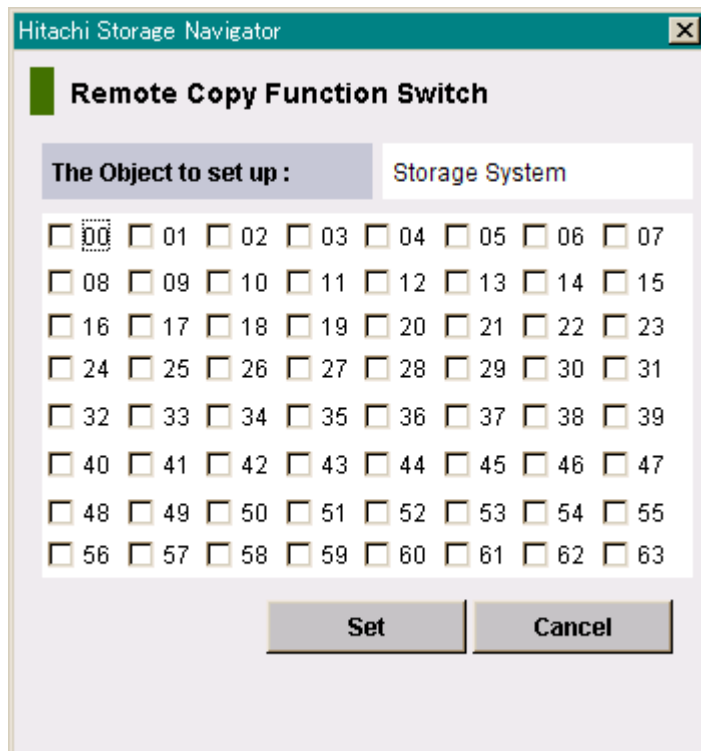
The [Function Switch] node appears in the tree of the System Option tab.

- Function Switch

The display of the list changes as shown in the above figure when the [Function Switch] node is selected.

Select the list and click the right mouse button, then [Function Switch] menu is displayed.

Select the [Function Switch] menu, then [Remote Copy Function Switch] dialog appears.



The dialog box is titled "Hitachi Storage Navigator" and "Remote Copy Function Switch". It contains two tabs: "The Object to set up :" and "Storage System". The "The Object to set up :" tab is active, showing a grid of 64 checkboxes numbered 00 to 63. The checkbox for 00 is checked. At the bottom, there are "Set" and "Cancel" buttons.

The Object to set up :							
<input checked="" type="checkbox"/> 00	<input type="checkbox"/> 01	<input type="checkbox"/> 02	<input type="checkbox"/> 03	<input type="checkbox"/> 04	<input type="checkbox"/> 05	<input type="checkbox"/> 06	<input type="checkbox"/> 07
<input type="checkbox"/> 08	<input type="checkbox"/> 09	<input type="checkbox"/> 10	<input type="checkbox"/> 11	<input type="checkbox"/> 12	<input type="checkbox"/> 13	<input type="checkbox"/> 14	<input type="checkbox"/> 15
<input type="checkbox"/> 16	<input type="checkbox"/> 17	<input type="checkbox"/> 18	<input type="checkbox"/> 19	<input type="checkbox"/> 20	<input type="checkbox"/> 21	<input type="checkbox"/> 22	<input type="checkbox"/> 23
<input type="checkbox"/> 24	<input type="checkbox"/> 25	<input type="checkbox"/> 26	<input type="checkbox"/> 27	<input type="checkbox"/> 28	<input type="checkbox"/> 29	<input type="checkbox"/> 30	<input type="checkbox"/> 31
<input type="checkbox"/> 32	<input type="checkbox"/> 33	<input type="checkbox"/> 34	<input type="checkbox"/> 35	<input type="checkbox"/> 36	<input type="checkbox"/> 37	<input type="checkbox"/> 38	<input type="checkbox"/> 39
<input type="checkbox"/> 40	<input type="checkbox"/> 41	<input type="checkbox"/> 42	<input type="checkbox"/> 43	<input type="checkbox"/> 44	<input type="checkbox"/> 45	<input type="checkbox"/> 46	<input type="checkbox"/> 47
<input type="checkbox"/> 48	<input type="checkbox"/> 49	<input type="checkbox"/> 50	<input type="checkbox"/> 51	<input type="checkbox"/> 52	<input type="checkbox"/> 53	<input type="checkbox"/> 54	<input type="checkbox"/> 55
<input type="checkbox"/> 56	<input type="checkbox"/> 57	<input type="checkbox"/> 58	<input type="checkbox"/> 59	<input type="checkbox"/> 60	<input type="checkbox"/> 61	<input type="checkbox"/> 62	<input type="checkbox"/> 63

Set Cancel

Make the check box turn on or turn off, and select (CL) the [Set] button.

Confirm the content of the Preview box, and select (CL) the [Apply] button.

Note: Perform the operation only when it is directed by the Technical Support Division.

Note: Please refer to “3.8 Remote Copy Function Switch” ([WEB03-160](#)) for the function allocated in each switch.

3.8 Remote Copy Function Switch

The function allocated in each switch is as follows.

Switch#	Contents
11	A copy pace is made a maximum 32 Tracks, when “15 Tracks” is selected in the Remote Copy option parameter and “Track” is selected in the Difference Management. But this function is not applied for OPEN-V, and a copy pace is set “4 Tracks” for OPEN-V.
12	When Add Pair or Resume Pair is operated with the Mainframe Host/Raid Manager, Only M-VOL is set up in the CFW Data option.
15	The path failure threshold values of function switch #17 are changed. By the combination of function switch #15 and #20 the path failure threshold values are changed.
17	The path is blocked when the number of path failures reaches the threshold within a certain period.
18	The path is blocked when the number of link failures reaches the threshold within a certain period
20	The path failure threshold values of function switch #17 are changed. By the combination of function switch #15 and #20 the path failure threshold values are changed.
21	When Add Pair or Resume Pair is operated with the PPRC command for DKC Emulation = 2105/2107, 3 Tracks is set up in the Initial Copy Pace option.
30	The following functions are supported. <ul style="list-style-type: none"> • When the pair from Storage Navigator is formed, the pair is formed with SyncCTG#7F. • When all the connections from MCU-RCU PATH cut, S-VOL that belongs to SyncCTG#7F is suspended.
33	In the cases that a PDCM function of McData ES3232 is being used on MCU-RCU path, when response of LOGIN response is late, path status of MCU is changed to non-normal.
36	This bit specifies “Enable” in time stamp option at Add Pair or Resume Pair from GDPS/Raid Manager. TC-MF/UR-MF cascade form makes time stamp option of TC-MF “Enable”, and keeps Consistency of UR-MF. But, the TC-MF pair formation or Resume Pair with GDPS/Raid Manager uses an optional time stamp and because “Enable” cannot be directed, this bit is used.
41	The path is blocked when the number of RIO response time that exceeds the decided time reaches the threshold within a certain period. The decided time is changed by combination of function switch #41 and #42.
42	The path is blocked when the number of RIO response time that exceeds the decided time reaches the threshold within a certain period. The decided time is changed by combination of function switch #41 and #42.
43	In the function of switch #17 or switch #41 and #42, the path is blocked even if the number of path is less than that is set by minimum path.

3.9 Dynamic Provisioning/Dynamic Tiering/Dynamic Provisioning for Mainframe/Dynamic Tiering for Mainframe

« Storage Systems Last Updated : 2012/06/28 19:23 Refresh View Help

Pools

[Storage\(S/N:64560\)](#) > Pools

Summary

		DP	Mainframe DP	TI	SS
Pool Capacity	Used/Total	7.87 GB / 14.05 TB [1 %]	0.00 MB / 78.05 GB [0 %]	0.00 MB / 66.59 GB [0 %]	0.00 MB / 66.59 GB [0 %]
	Estimated Configurable	550.30 TB	346.63 TB	5.47 TB	5.47 TB
V-VOL Capacity	Allocated/Total	67.00 GB / 117.00 GB [57 %]	27.88 GB / 27.88 GB [100 %]	-	-
	Estimated Configurable	564.26 TB	346.68 TB	-	-
Licensed Capacity (Used/Licensed)		0.00 MB / Unlimited	0.00 MB / Unlimited	0.00 MB / Unlimited	0.00 MB / Unlimited
Number of Pools		44 (Max Allowed: 128)			

Pools

Filter ☐ ON ☒ OFF Select All Pages Options 1 / 1

Pool Name (ID)	Status	Number of Pool VOLS	Number of V-VOLs	Number of Primary VOLS	RAID Level	Capacity			User-Defined Thr
						Total	Used	Used (%)	
14D_MF(0)	Normal	1	1	-	6(14D+...	14.86 GB	0.00 GB	0	70
14D_MF...	Normal	1	1	-	6(14D+...	14.86 GB	0.00 GB	0	70
MIX_MF(2)	Normal	1	1	-	1(2D+2D)	14.86 GB	0.00 GB	0	70
14D2PC...	Normal	1	0	-	6(14D+...	3.89 GB	0.00 GB		
14D2PC...	Normal	1	0	-	6(14D+...	3.89 GB	0.00 GB		
saigan(5)	Normal	4	3	-	6(6D+2P)	11001.3...	3.93 GB		
CP_16D...	Normal	2	0	-	6(14D+...	11.89 GB	0.00 GB		
CP_16D...	Normal	2	0	-	Mixed	23.41 GB	0.00 GB		
CP_16D...	Normal	3	0	-	Mixed	31.41 GB	0.00 GB		
CP_14D...	Normal	2	0	-	6(14D+...	11.89 GB	0.00 GB		
14D_OP(...	Normal	1	1	-	6(14D+...	15.42 GB	0.00 GB		
14D_OP...	Normal	2	1	-	6(14D+...	23.41 GB	1.96 GB		
14D_OP...	Normal	1	1	-	6(14D+...	15.42 GB	0.00 GB		

Selected: 0 of 44

Create Pools Create LDEVs Expand Pool More Actions

More Actions menu:

- Delete Pools
- Restore Pools
- Edit Pools
- Initialize Pools
- Monitor Pools
- Stop Monitoring Pools
- Start Tier Relocation
- Stop Tier Relocation
- Complete SIMs
- View Tier Properties
- View Pool Management Status
- Export
- Tier Relocation Log

(1) Preview box

When the Pools window is opened by Web Console on the SVP, the [More Actions] button is displayed in the Preview box is clicked, and [Initialize Pools] is selected.

- Initialize Pools

The Virtual Volumes of Dynamic Provisioning / Dynamic Tiering / Dynamic Provisioning for Mainframe / Dynamic Tiering for Mainframe (DP-VOL) is blockaded. And the pool of all Dynamic Provisioning / Dynamic Tiering / Dynamic Provisioning for Mainframe / Dynamic Tiering for Mainframe / Thin Image is blockaded.

Refer to the TROUBLE SHOOTING SECTION “20.10 Initialize Pools procedure” (TRBL20-100) for the Initialize procedure and notes.

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

- Note 1: The pool of all Dynamic Provisioning / Dynamic Tiering / Dynamic Provisioning for Mainframe / Dynamic Tiering for Mainframe / Thin Image is blockaded.
- Note 2: In the case [TrueCopy / Universal Replicator / ShadowImage / Volume Migration / Copy-on-Write Snapshot / XRC / FlashCopy (R) V2 / FlashCopy (R) SE] use virtual volumes of Dynamic Provisioning / Dynamic Tiering / Dynamic Provisioning for Mainframe / Dynamic Tiering for Mainframe, delete all [TrueCopy / Universal Replicator / ShadowImage / Volume Migration / Copy-on-Write Snapshot / XRC / FlashCopy (R) V2 / FlashCopy (R) SE] pairs that use the virtual volumes before performing Initialize.
After Initialize completes, create [TrueCopy / Universal Replicator / ShadowImage / Volume Migration / Copy-on-Write Snapshot / XRC / FlashCopy (R) V2 / FlashCopy (R) SE] pairs again.
During initialize, don't create [TrueCopy / Universal Replicator / ShadowImage / Volume Migration / Copy-on-Write Snapshot / XRC / FlashCopy (R) V2 / FlashCopy (R) SE] pairs with Virtual Volumes of Dynamic Provisioning / Dynamic Tiering / Dynamic Provisioning for Mainframe / Dynamic Tiering for Mainframe. In the case those pairs, initialize and paircreate operation may fail.
- Note 3: Delete all Thin Image pairs before performing Initialize.
After Initialize completes, create Thin Image pairs again.
During Initialize, don't create Thin Image pairs. In the case create Thin Image pairs, initialize and paircreate operation may fail.
- Note 4: Do not execute the maintenance of Dynamic Provisioning until the pool restores normally after executing Initialize.
- Note 5: Procedure to recover DP-VOL:
Please recover the pool of Dynamic Provisioning / Dynamic Tiering / Dynamic Provisioning for Mainframe / Dynamic Tiering for Mainframe referring to "Provisioning Guide for Open Systems" or "Provisioning Guide for Mainframe Systems".
DP-VOL recovers by recovering the pool of Dynamic Provisioning / Dynamic Tiering / Dynamic Provisioning for Mainframe / Dynamic Tiering for Mainframe.
- Note 6: Perform the operation only when it is directed by the Technical Support Division.

3.10 Local Replication

Select (CL) [Replications]-[Local Replications] in the tree of the top of the Storage Navigator main window.

Select (CL) [Edit SCP Time] button, the [Edit SCP Time] window will appear.

Edit SCP Time

1. Edit SCP Time > 2. Confirm

This wizard lets you edit SCP time. Select the CU you want to edit in the SCP Time list and click Change SCP Time to edit it. Click Finish to confirm.

SCP Time:

CU	SCP Time (sec.)
00	120
01	120
02	120
03	120
04	120
05	120
06	0
07	0
08	0
09	0
0A	0
0B	0
0C	0
0D	0
0E	120

Selected: 0 of 255

Change SCP Time

Back Next Finish Cancel Help

- (1) The display of CU
CU Number and SCP Time of all the 255 pieces (#00 to #FE) are displayed on [SCP Time], and all the SCP Time can be changed.
- (2) Changing the SCP Time
 - (a) In the [Edit SCP Time] window, select (CL) all CUs to which the SCP Time exceeding 600 seconds is set, and select (CL) [Change SCP Time] button.
 - (b) [Change SCP Time] window will appear.
 - (c) In the [Change SCP Time] window, enter 120 seconds (default value) and select (CL) [OK] button.
 - (d) Select (CL) [Finish] button on the [Edit SCP Time] window.
 - (e) In the Confirm window, select (CL) [Apply] button.

5. Procedure of server software uninstallation/installation

Please accord to the following procedures when you reinstall each server software.

- Note:
- SVP version changes first when SVP version needs to be changed by the server software reinstallation.
 - When you reinstall each server software, end the all work.

5.1 Apache

5.1.1 Uninstallation of Apache

Before reinstalling Apache, you need to uninstall the Apache already installed in the SVP. Uninstall the Apache in the following procedure.

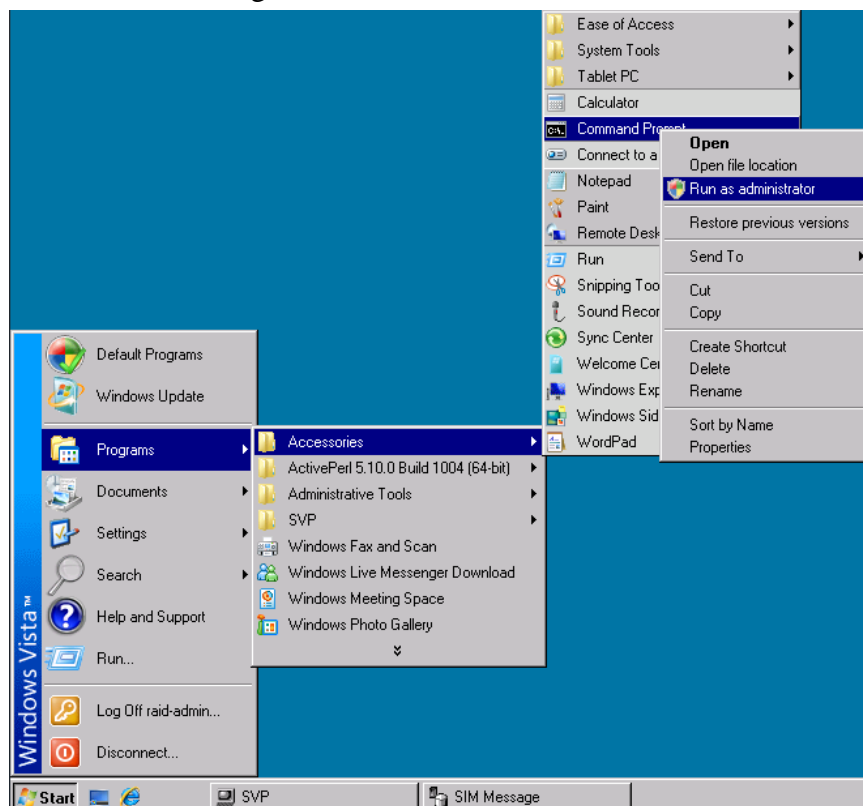
Notice: After uninstallation of Apache is finished, you must next complete the procedure in “5.1.2 Installation of Apache” before modifying any other software product on the SVP. If you shutdown or logout the SVP before completion of “5.1.2 Installation of Apache”, SVP failure may occur. If a shutdown request message is displayed by the software product during uninstall/install, please disregard.

(1) Mount the OSS media

Insert the OSS media (the second media) to the CD-ROM drive in the Console PC.

(2) Launch the Command Prompt as administrator

Select (CL) [Start]-[Programs]-[Accessories], and launch the Command Prompt with ‘Run as administrator’ in right-click menu.



(3) Launch the uninstallation batch

Enter “\\tsclient\<drive letter>\JavaAp\Apache\ApacheUnInst.bat” into the Command Prompt, and press the Enter key.

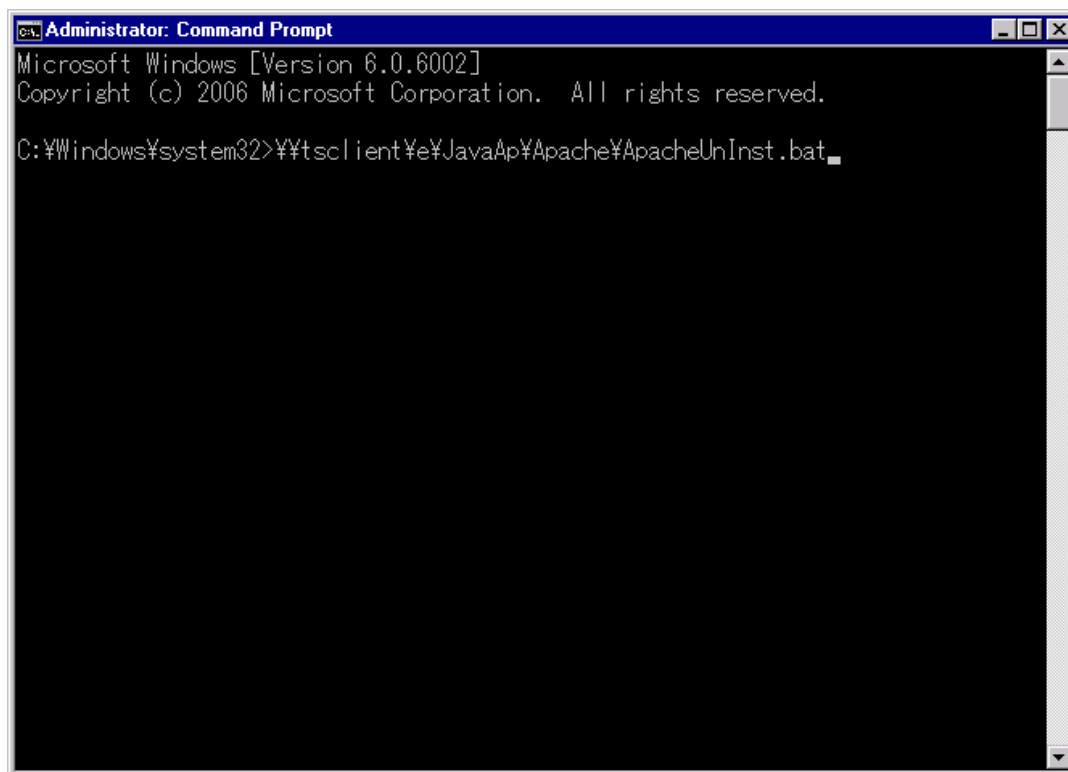
At the end of this process, the Command Prompt will close automatically.

Note: The input value is the form of

“\\tsclient\<drive letter>\JavaAp\Apache\ApacheUnInst.bat”.

A drive letter is made the drive which inserted the OSS media.

The above is a case where the CD-ROM drive is assigned a drive letter E.



Notice: After uninstallation of Apache is finished, you must next complete the procedure in “5.1.2 Installation of Apache” before modifying any other software product on the SVP. If you shutdown or logout the SVP before completion of “5.1.2 Installation of Apache”, SVP failure may occur. If a shutdown request message is displayed by the software product during uninstall/install, please disregard.

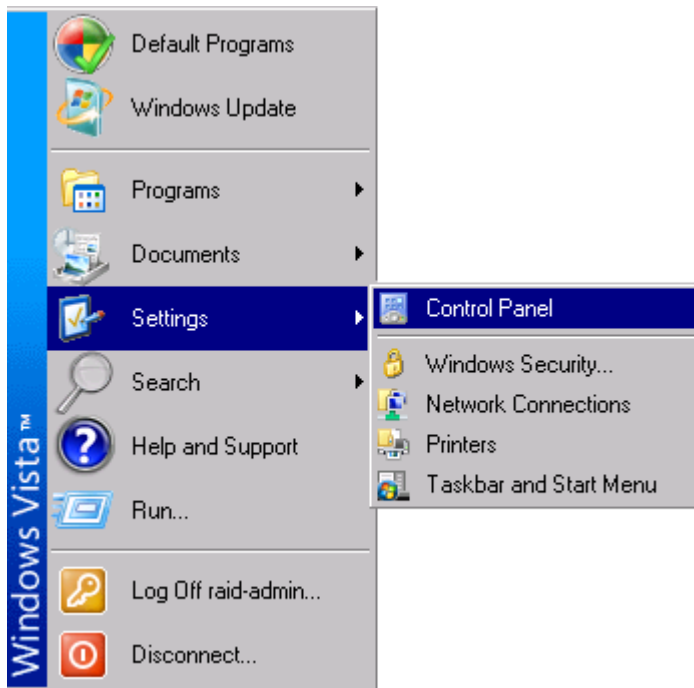
If following error message is displayed on the Web Console, not select (CL) [OK] button. And follow the steps below.



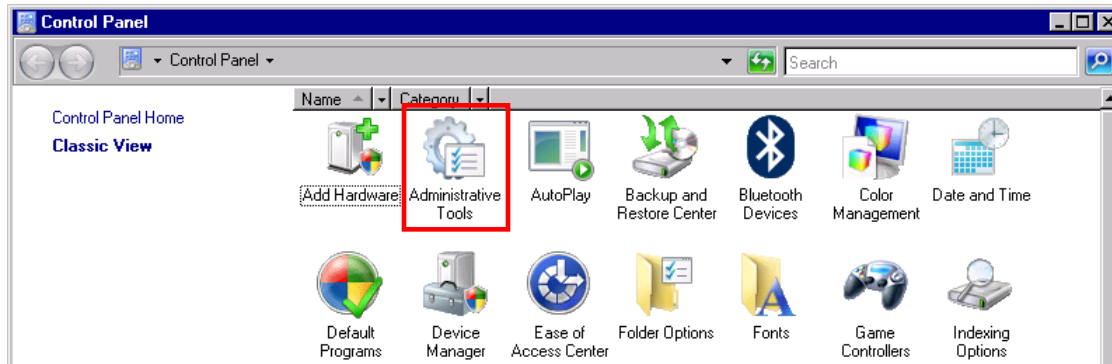
Notice: It is all right when you press the [OK] button. And follow the steps below.

(4) Open Control Panel

Select (CL) [Start]-[Settings]-[Control Panel].



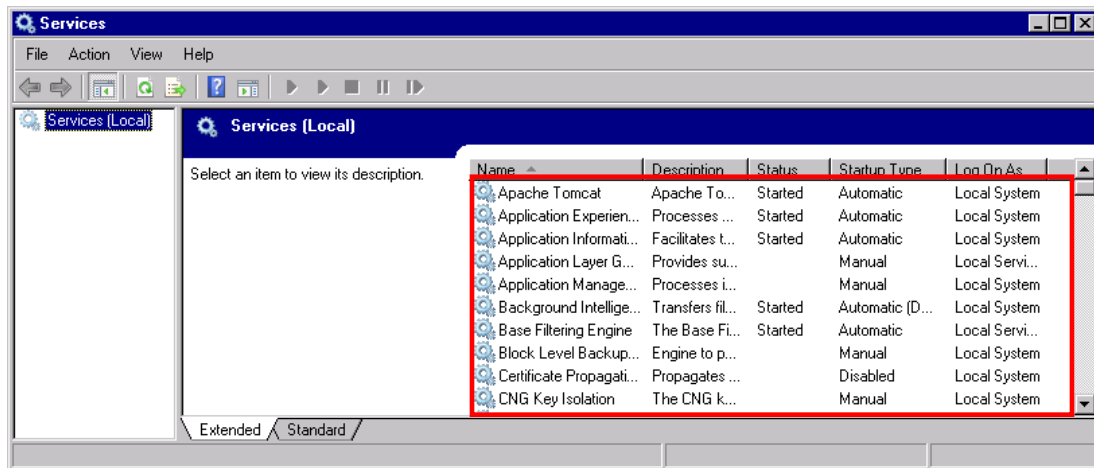
- (5) Open Administrative Tools
Select (DC) [Administrative Tools].



- (6) Open Services
Select (DC) [Services].

Name	Date modified	Type	Size
Computer Management	1/21/2008 3:20 ...	Shortcut	2 KB
Data Sources (ODBC)	11/2/2006 3:29 ...	Shortcut	2 KB
Event Viewer	11/2/2006 3:29 ...	Shortcut	2 KB
Internet Information S...	3/7/2011 9:12 PM	Shortcut	2 KB
iSCSI Initiator	11/2/2006 3:29 ...	Shortcut	2 KB
Local Security Policy	1/21/2008 3:21 ...	Shortcut	2 KB
Memory Diagnostics ...	11/2/2006 3:26 ...	Shortcut	2 KB
Print Management	11/2/2006 3:31 ...	Shortcut	2 KB
Reliability and Perfor...	1/21/2008 3:20 ...	Shortcut	2 KB
Services	1/21/2008 3:20 ...	Shortcut	2 KB
System Configuration	11/2/2006 3:26 ...	Shortcut	2 KB
Task Scheduler	11/2/2006 3:29 ...	Shortcut	2 KB
Windows Firewall wit...	1/21/2008 3:21 ...	Shortcut	2 KB

- (7) Confirm that the Apache is uninstalled
Confirm that there are not the Apache2.2 in “Name” list.



Notice: If installed Apache2.2, try again from installation procedure “5.1.1 Uninstallation of Apache”.

- (8) Unmount the OSS media
Remove the OSS media (the second media) from the CD-ROM drive in the Console PC.

5.1.2 Installation of Apache

When installing Apache, follow the procedure shown below. Be sure to check that the uninstallation processing is completed before installing it.

Installed Apache version is different by OSS version. Refer to the following.

Table 5.1.2-1 Installed Apache Properties

OSS Versions	Apache Versions	Conditions
70-01-00/00 ~	Apache2.2.10 (OpenSSL0.9.8o)	<ul style="list-style-type: none"> • Get ready OSS media version 70-06-05/xx less than 70-01-00/00 or later. • SVP version is 70-01-01/00 or later. • Apache is uninstalled. • Procedure refers to “5.1.2.1 Installation of Apache (Default)”.
70-06-03/00, 70-06-04/00	Apache2.2.24 (OpenSSL1.0.1g)	<ul style="list-style-type: none"> • Get ready OSS media version 70-06-03/xx or 70-06-04/00 or later. • SVP version is 70-06-10/00 or later. • Apache is uninstalled. • Procedure refers to “5.1.2.2 Installation of Apache2.2.24”.
70-06-05/xx ~	Apache2.2.27 (OpenSSL1.0.1h)	<ul style="list-style-type: none"> • Get ready OSS media version 70-06-05/xx or later. • SVP version is 70-06-10/00 or later. • Apache is uninstalled. • Procedure refers to “5.1.2.1 Installation of Apache (Default)”.

5.1.2.1 Installation of Apache (Default)

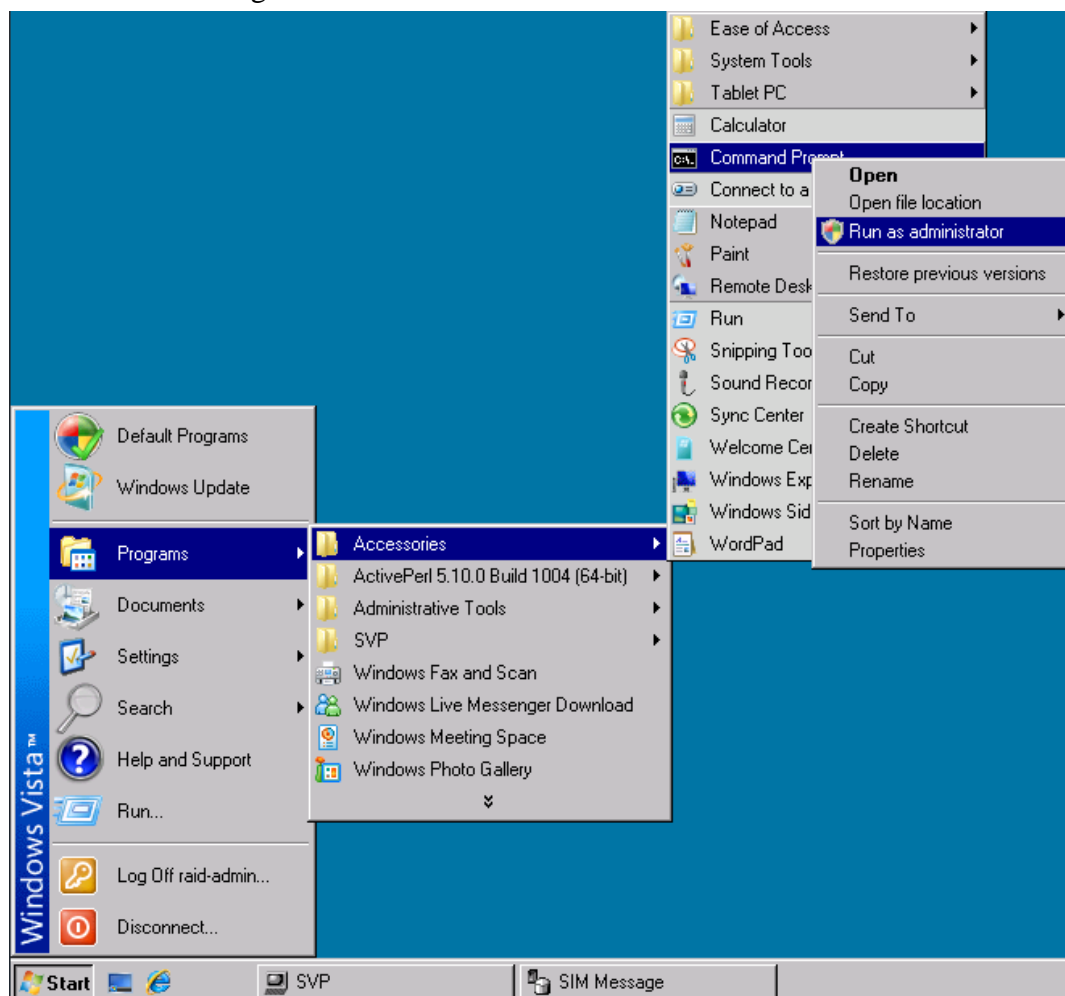
Confirm to meet the Apache installation conditions using “Table 5.1.2-1 Installed Apache Properties” in “5.1.2 Installation of Apache”, and begin the installation.

(1) Mount the OSS media

Insert the OSS media (the second media) to the CD-ROM drive in the Console PC.

(2) Launch the Command Prompt as administrator

Select (CL) [Start]-[Programs]-[Accessories], and launch the Command Prompt with ‘Run as administrator’ in right-click menu.



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(3) Launch the installation batch

Enter “\\tsclient\<drive letter>\JavaAp\Apache\ApacheInst_StandAlone.bat” into the Command Prompt, and press the Enter key.

At the end of this process, the Command Prompt will close automatically.

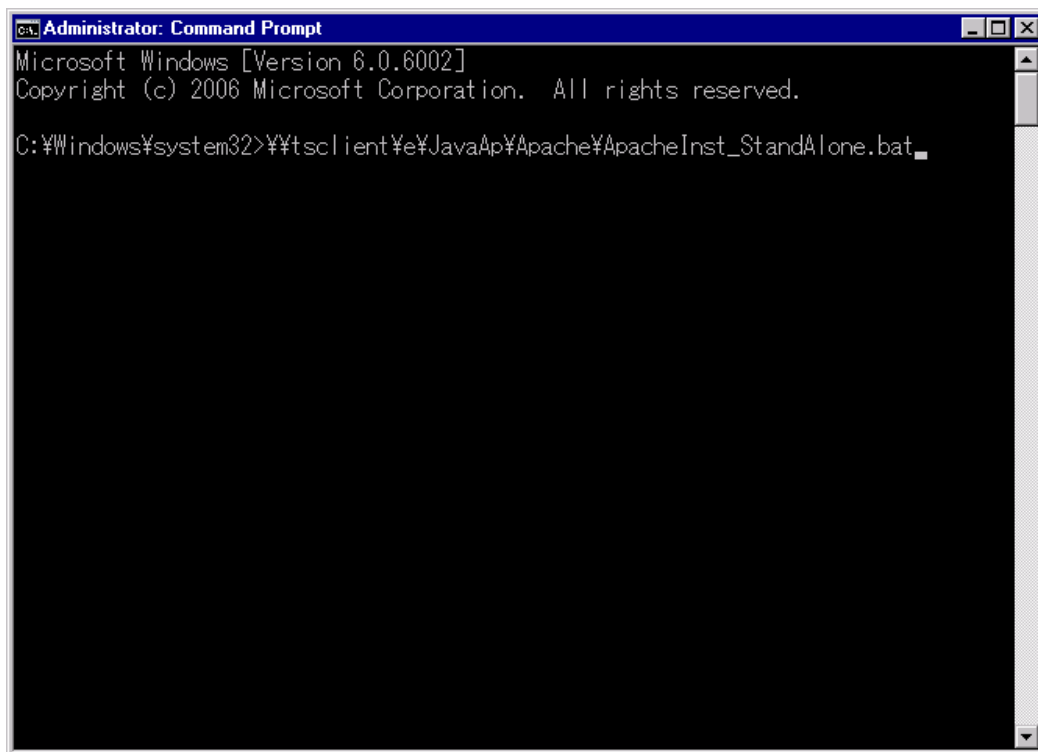
Note: •The input value is the form of

“\\tsclient\<drive letter>\JavaAp\Apache\ApacheInst_StandAlone.bat”.

A drive letter is made the drive which inserted the OSS media.

The above is a case where the CD-ROM drive is assigned a drive letter E.

•When Command Prompt did not close automatically, select [×], close the window.



The things of default are set in the key creation for SSL communication and the certificate file. When you install an SSL communication key and a certificate file responding to the customer's request, see "Hitachi Storage Navigator User Guide".

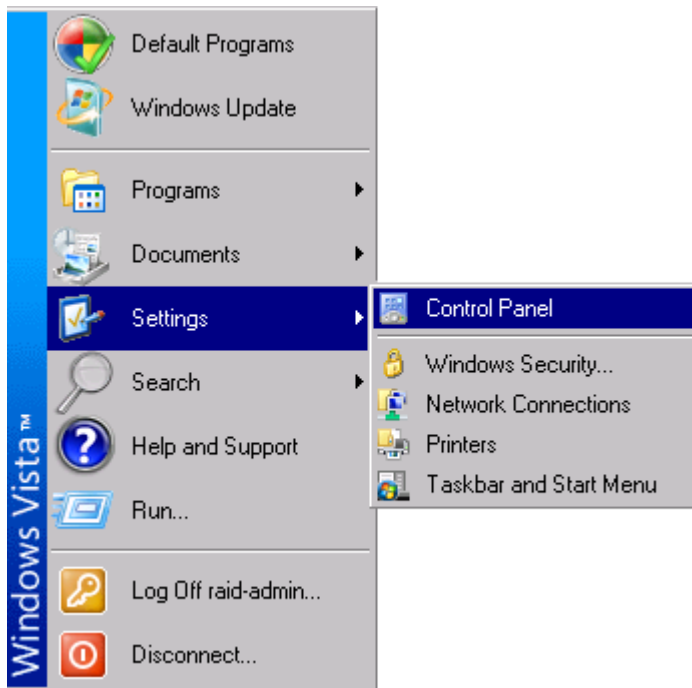
If following error message is displayed on the Web Console, not select (CL) [OK] button. And follow the steps below.



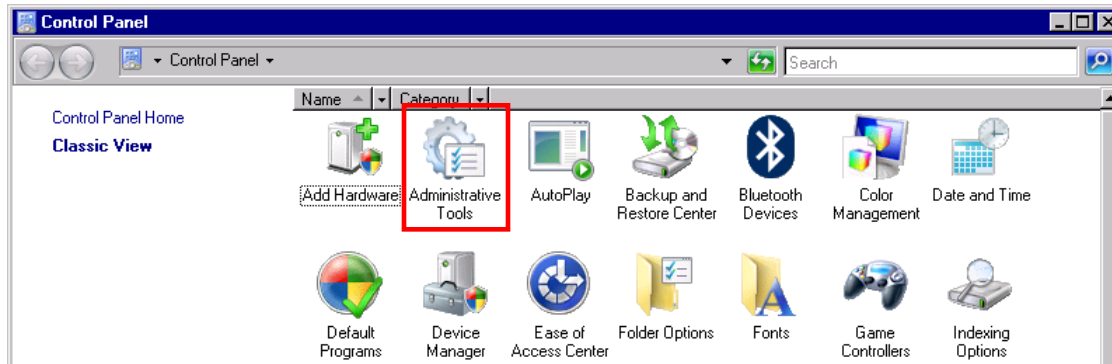
Notice: It is all right when you press the [OK] button. And follow the steps below.

(4) Open Control Panel

Select (CL) [Start]-[Settings]-[Control Panel].



- (5) Open Administrative Tools
Select (DC) [Administrative Tools].

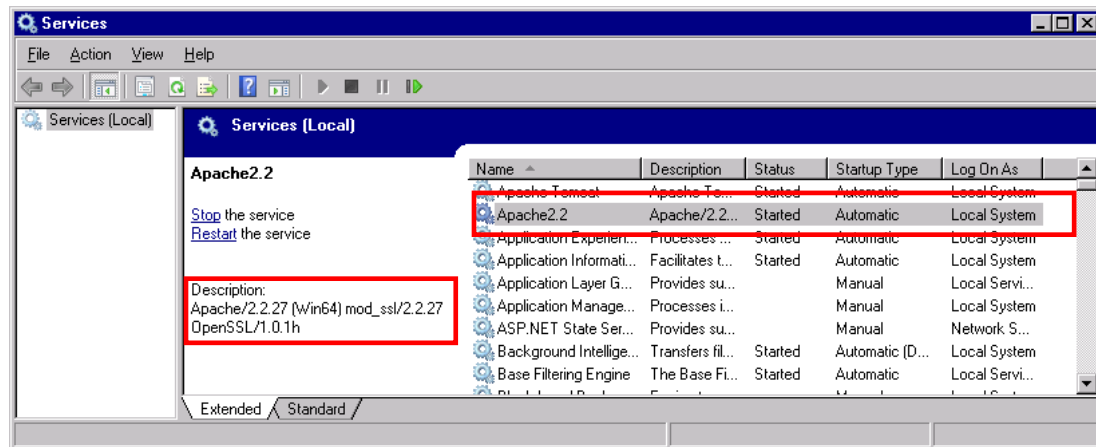


- (6) Open Services
Select (DC) [Services].

Name	Date modified	Type	Size
Computer Management	1/21/2008 3:20 ...	Shortcut	2 KB
Data Sources (ODBC)	11/2/2006 3:29 ...	Shortcut	2 KB
Event Viewer	11/2/2006 3:29 ...	Shortcut	2 KB
Internet Information S...	3/7/2011 9:12 PM	Shortcut	2 KB
iSCSI Initiator	11/2/2006 3:29 ...	Shortcut	2 KB
Local Security Policy	1/21/2008 3:21 ...	Shortcut	2 KB
Memory Diagnostics ...	11/2/2006 3:26 ...	Shortcut	2 KB
Print Management	11/2/2006 3:31 ...	Shortcut	2 KB
Reliability and Perfor...	1/21/2008 3:20 ...	Shortcut	2 KB
Services	1/21/2008 3:20 ...	Shortcut	2 KB
System Configuration	11/2/2006 3:26 ...	Shortcut	2 KB
Task Scheduler	11/2/2006 3:29 ...	Shortcut	2 KB
Windows Firewall wit...	1/21/2008 3:21 ...	Shortcut	2 KB

(7) Select (CL) “Apache2.2” and Confirm installed Apache (OpenSSL) version

Installed Apache (OpenSSL) version refers to “Table 5.1.2-1 Installed Apache Properties” in “5.1.2 Installation of Apache”.



Notice: • If there is no “Apache2.2” in “Name” list, try again from the installation procedure (1). If you shutdown or logout the SVP before completion of “Installation of Apache”, SVP failure may occur. If a shutdown request message is displayed by the software product during uninstall/install, please disregard.

- In addition, if the installed version is different from the version you expect, please reboot the SVP. And try again from installation procedure “5.1.1 Uninstallation of Apache”.

(8) Unmount the OSS media

Remove the OSS media (the second media) from the CD-ROM drive in the Console PC.

(9) Reboot the SVP

Select (CL) [Start]-[Run...].

Enter “shutdown /r /t 0” and press the Enter key.

The SVP will be rebooted.

Notice: When the SVP High Reliability Kit is installed, you need to install it for the standby SVP in the same procedure.

About the switching SVP, refer to Post-Procedure “2.18. SVP Switching” in the “SVP SECTION” ([SVP02-1420](#)).

5.1.2.2 Installation of Apache2.2.24

In SVP version 70-06-10/00 or later, Apache2.2.24 (OpenSSL1.0.1g) is available.

Precondition:

- Get ready OSS media version 70-06-03/00 or 70-06-04/00.
- SVP version 70-06-10/00 or later is required.
- Apache needs to be uninstalled.

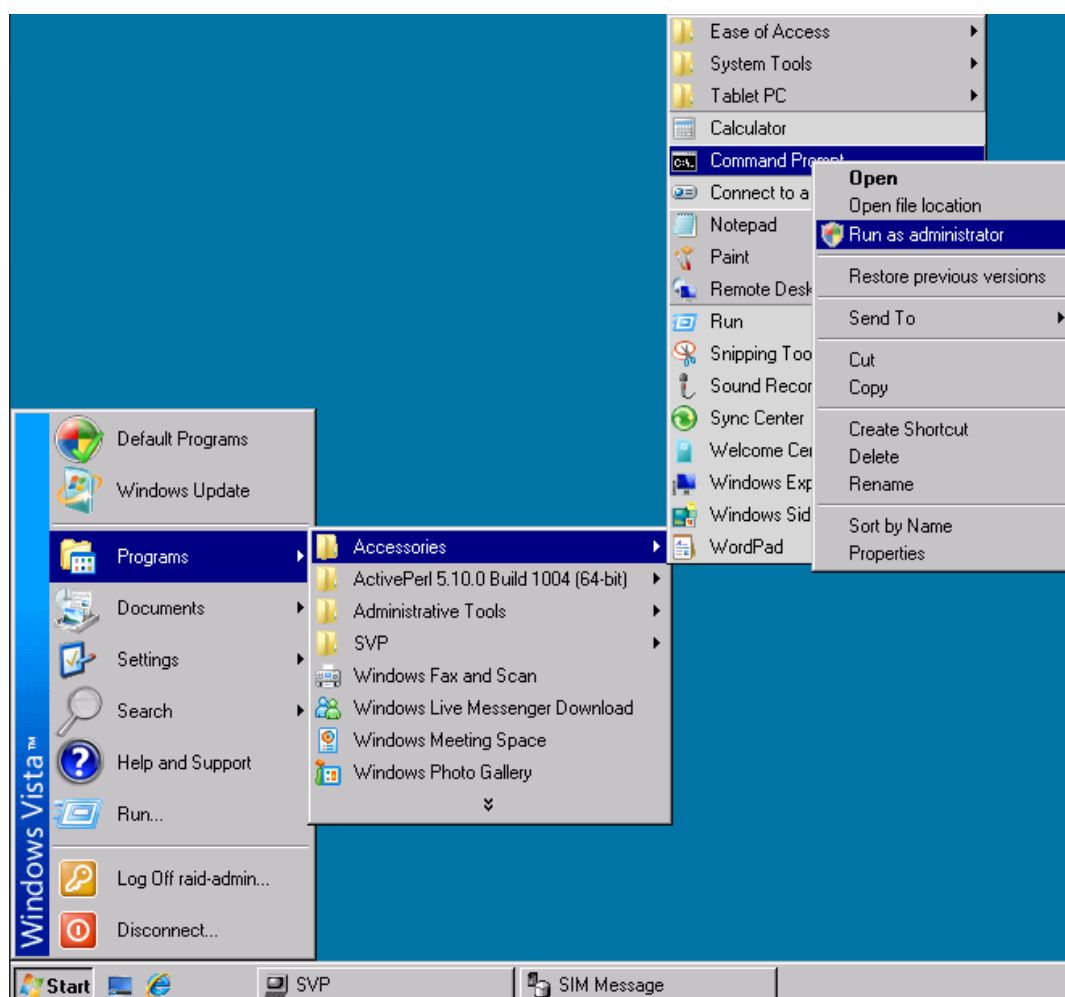
NOTE: Uninstall the Apache if Apache2.2.24 (OpenSSL1.0.1e) was installed with OSS media version less than 70-06-03/00.
And install Apache2.2.24 (OpenSSL1.0.1g) with OSS media version 70-06-03/00 or 70-06-04/00.

(1) Mount the OSS media

Insert the OSS media (the second media) to the CD-ROM drive in the Console PC.

(2) Launch the Command Prompt as administrator

Select (CL) [Start]-[Programs]-[Accessories], and launch the Command Prompt with 'Run as administrator' in right-click menu.



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(3) Launch the installation batch

Enter “\\tsclient\e\JavaAp\Apache\ApacheInst_StandAlone_2_2_24.bat” into the Command Prompt, and press the Enter key.

At the end of this process, the Command Prompt will close automatically.

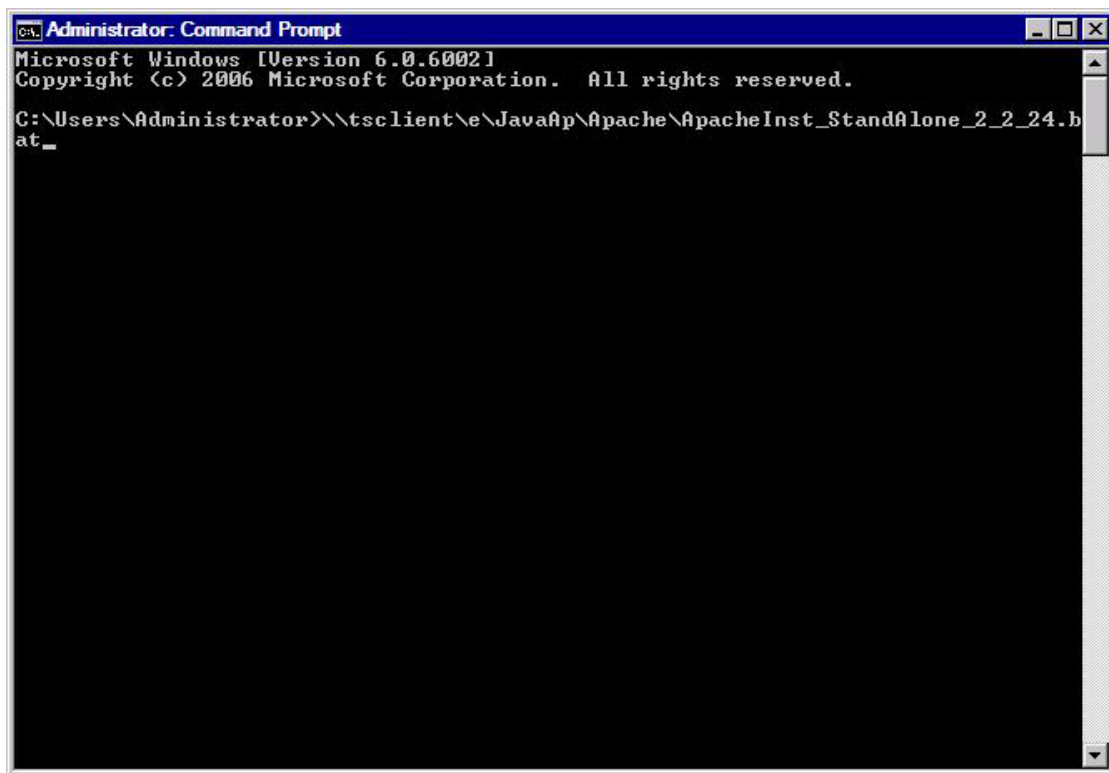
Note: •The input value is the form of

“\\tsclient\<drive letter>\JavaAp\Apache\ApacheInst_StandAlone_2_2_24.bat”.

A drive letter is made the drive which inserted the OSS media.

The above is a case where the CD-ROM drive is assigned a drive letter E.

•When Command Prompt did not close automatically, select [×], close the window.



The things of default are set in the key creation for SSL communication and the certificate file. When you install an SSL communication key and a certificate file responding to the customer's request, see "Hitachi Storage Navigator User Guide".

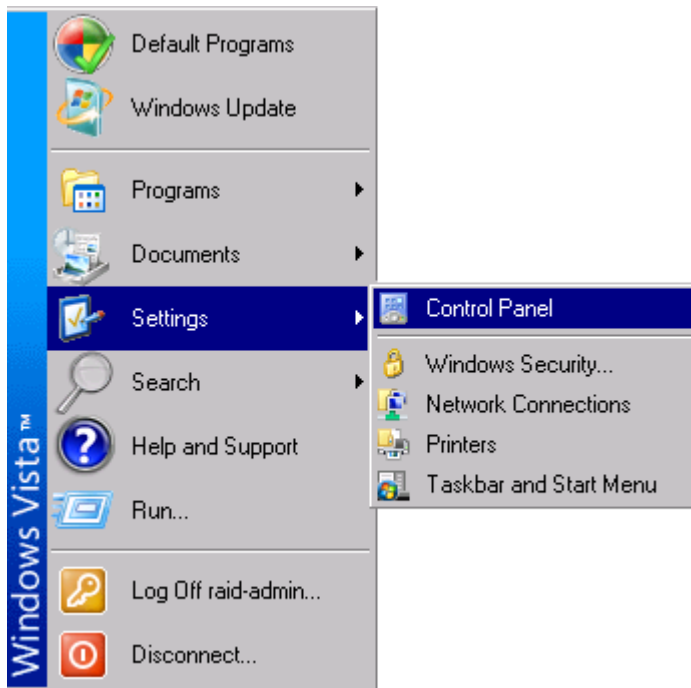
If following error message is displayed on the Web Console, not select (CL) [OK] button. And follow the steps below.



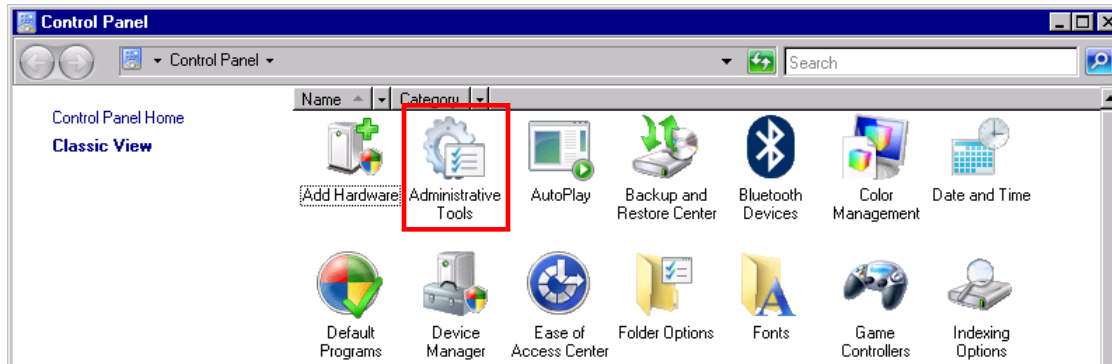
Notice: It is all right when you press the [OK] button. And follow the steps below.

(4) Open Control Panel

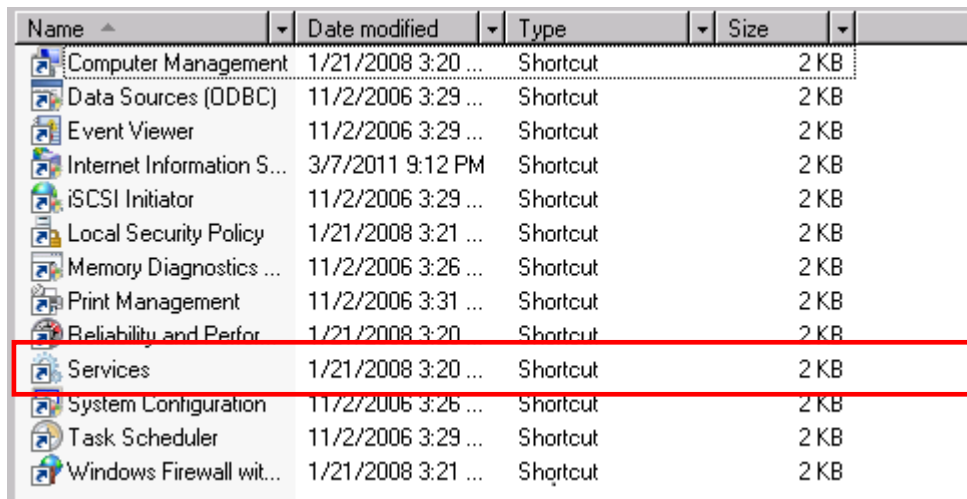
Select (CL) [Start]-[Settings]-[Control Panel].



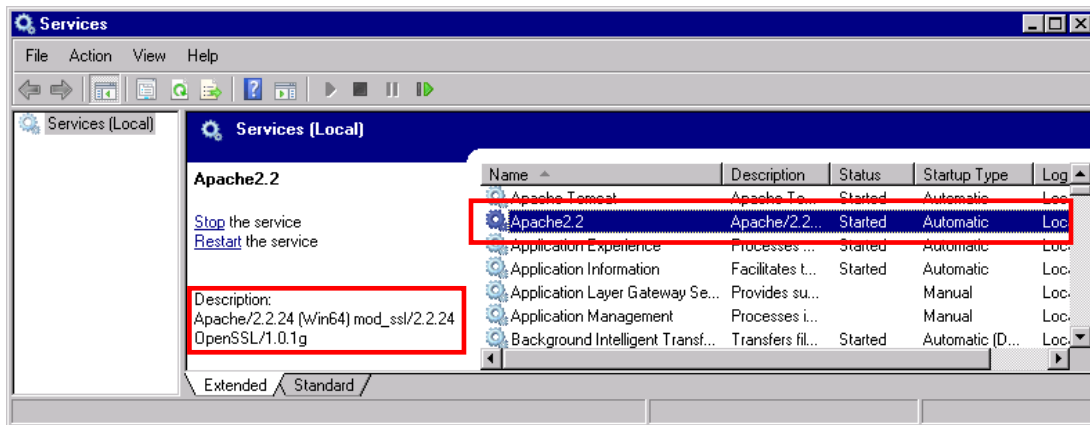
- (5) Open Administrative Tools
Select (DC) [Administrative Tools].



- (6) Open Services
Select (DC) [Services].



- (7) Select (CL) “Apache2.2” and Confirm that Apache2.2.24 (OpenSSL1.0.1g) is installed



- Notice:
- If there is no “Apache2.2” in “Name” list, try again from the installation procedure (1). If you shutdown or logout the SVP before completion of “Installation of Apache”, SVP failure may occur. If a shutdown request message is displayed by the software product during uninstall/install, please disregard.
 - In addition, if the installed version is different from the version you expect, please reboot the SVP. And try again from installation procedure “5.1.1 Uninstallation of Apache”.

- (8) Unmount the OSS media

Remove the OSS media (the second media) from the CD-ROM drive in the Console PC.

- (9) Reboot the SVP

Select (CL) [Start]-[Run...].

Enter “shutdown /r /t 0” and press the Enter key.

The SVP will be rebooted.

Notice: When the SVP High Reliability Kit is installed, you need to install it for the standby SVP in the same procedure.

About the switching SVP, refer to Post-Procedure “2.18. SVP Switching” in the “SVP SECTION” ([SVP02-1420](#)).

5.2 Tomcat

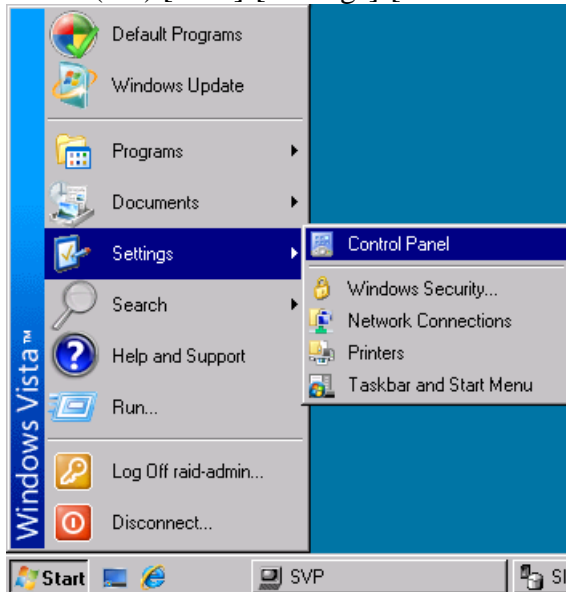
5.2.1 Uninstallation of Tomcat

Before reinstalling Tomcat, you need to uninstall the Tomcat already installed in the SVP. Uninstall the Tomcat in the following procedure.

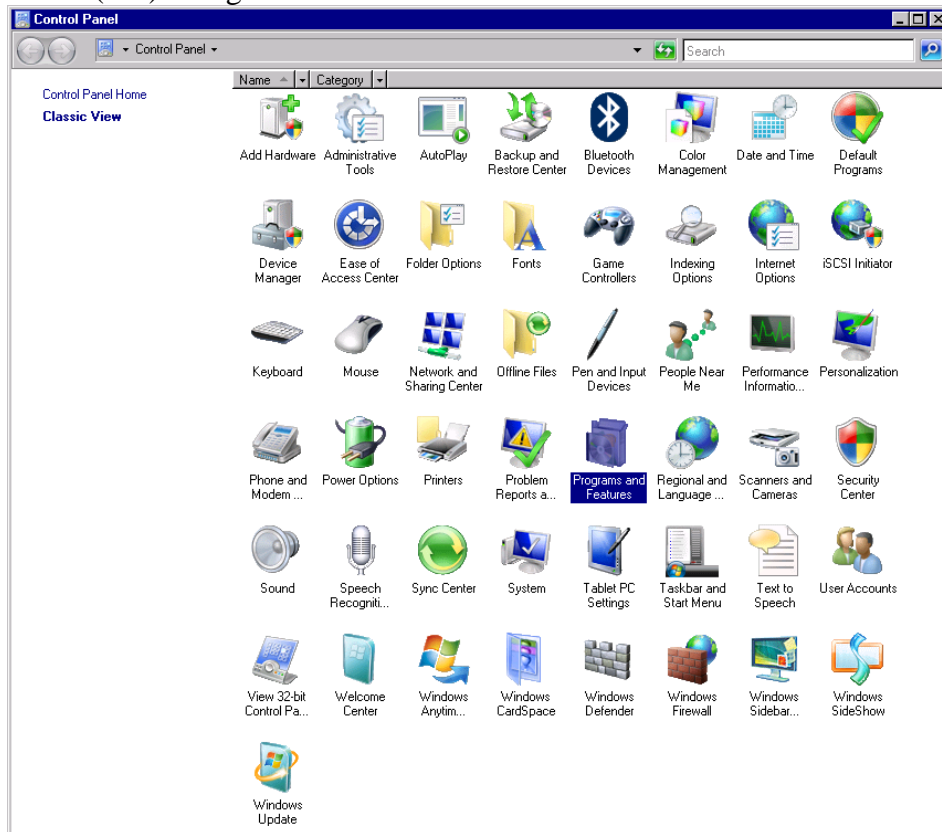
Notice: After uninstallation of Tomcat is finished, you must next complete the procedure in “5.2.2 Installation of Tomcat” before modifying any other software product on the SVP. If you shutdown or logout the SVP before completion of “5.2.2 Installation of Tomcat”, SVP failure may occur. If a shutdown request message is displayed by the software product during uninstall/install, please disregard.

(1) Open Control Panel

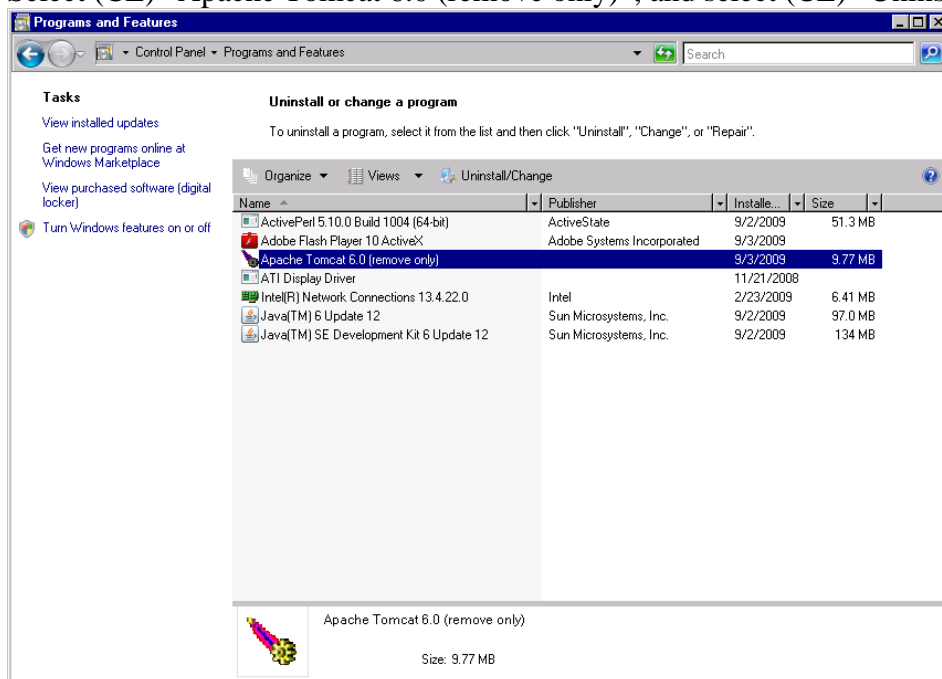
Select (CL) [Start]-[Settings]-[Control Panel].



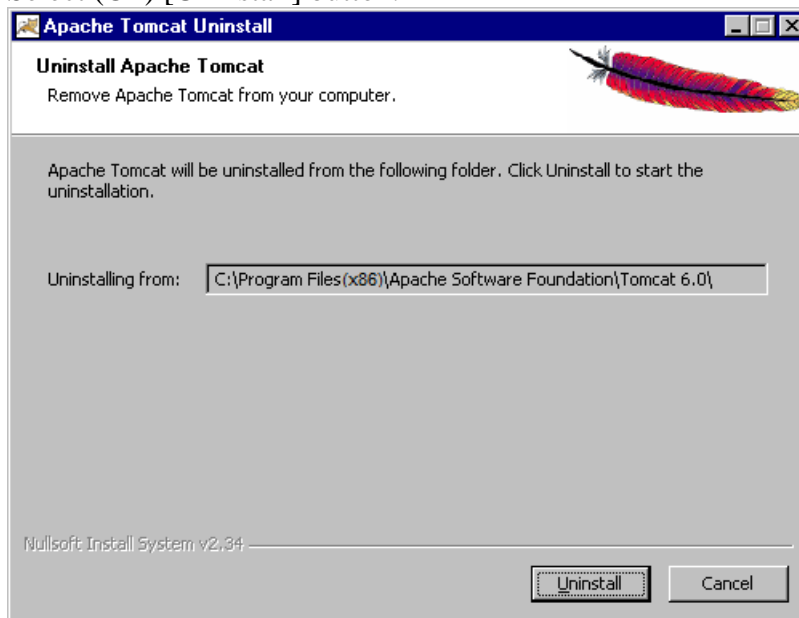
- (2) Open Program and Features
Select (DC) “Programs and Features”.



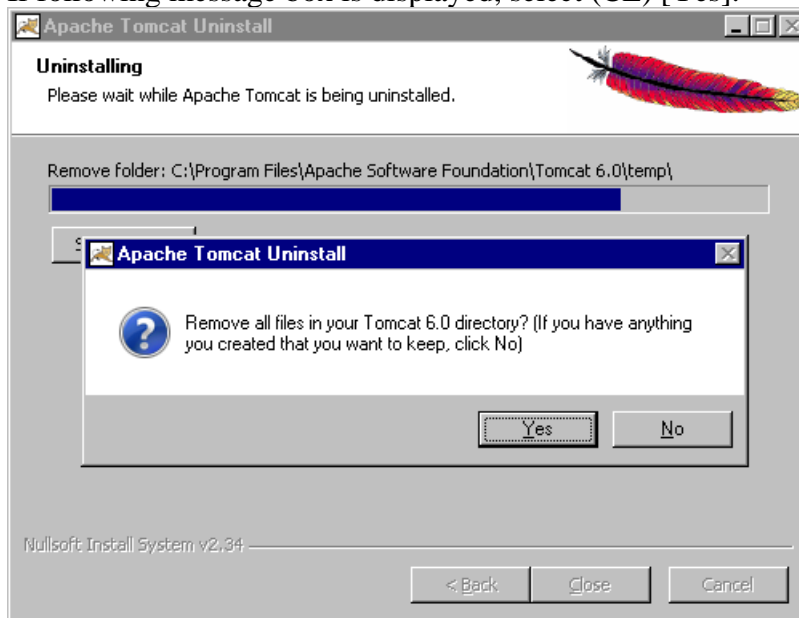
- (3) Run uninstallation
Select (CL) “Apache Tomcat 6.0 (remove only)”, and select (CL) “Uninstall/Change” button.



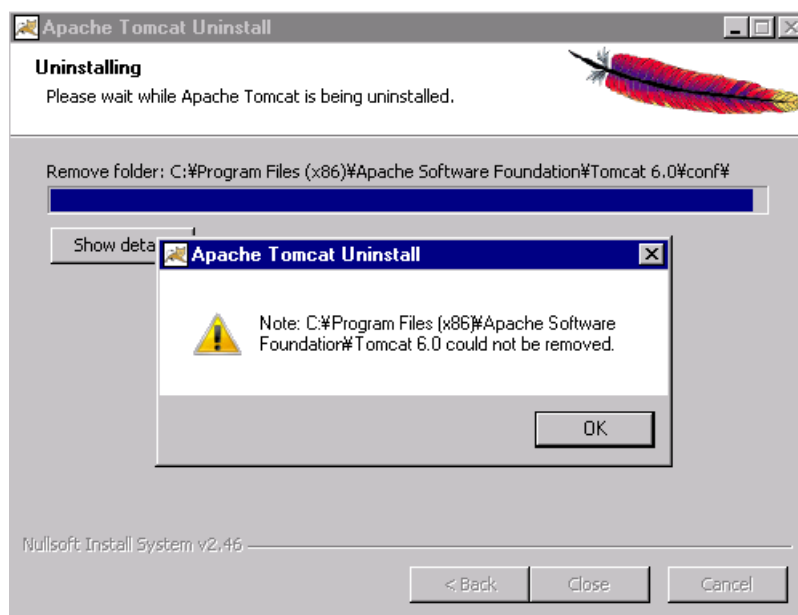
- (4) Proceed to the next
Select (CL) [Uninstall] button.



- (5) Make sure the message
If following message box is displayed, select (CL) [Yes].

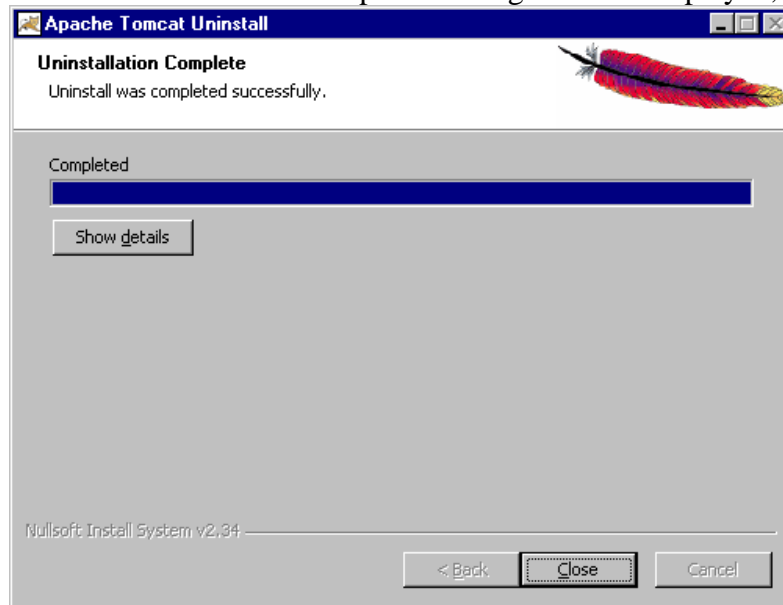


If following error message is displayed, select (CL) [OK] button. And follow the steps below.

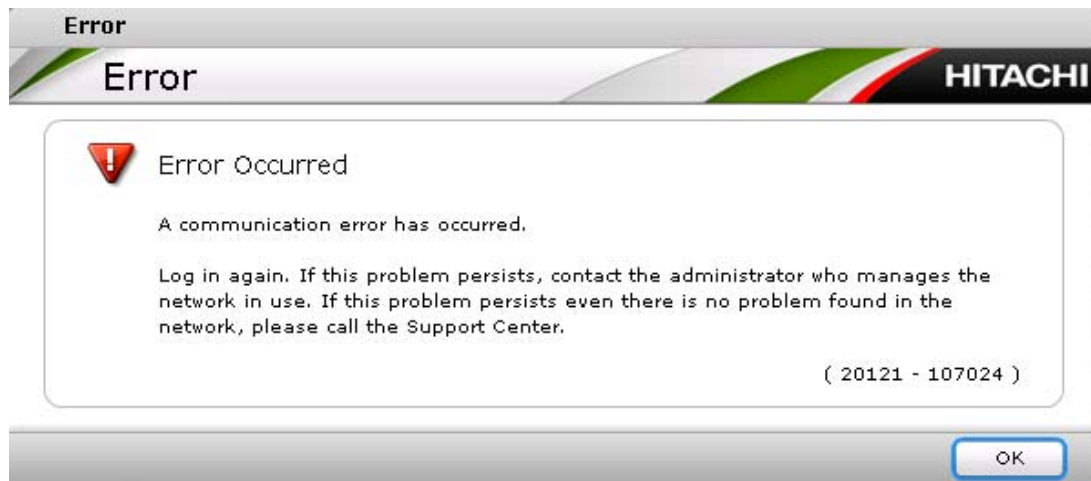


(6) Complete uninstallation

When “Uninstallation Complete” dialogue box is displayed, select (CL) [Close] button.



If following error message is displayed on the Web Console, not select (CL) [OK] button. And follow the steps below.

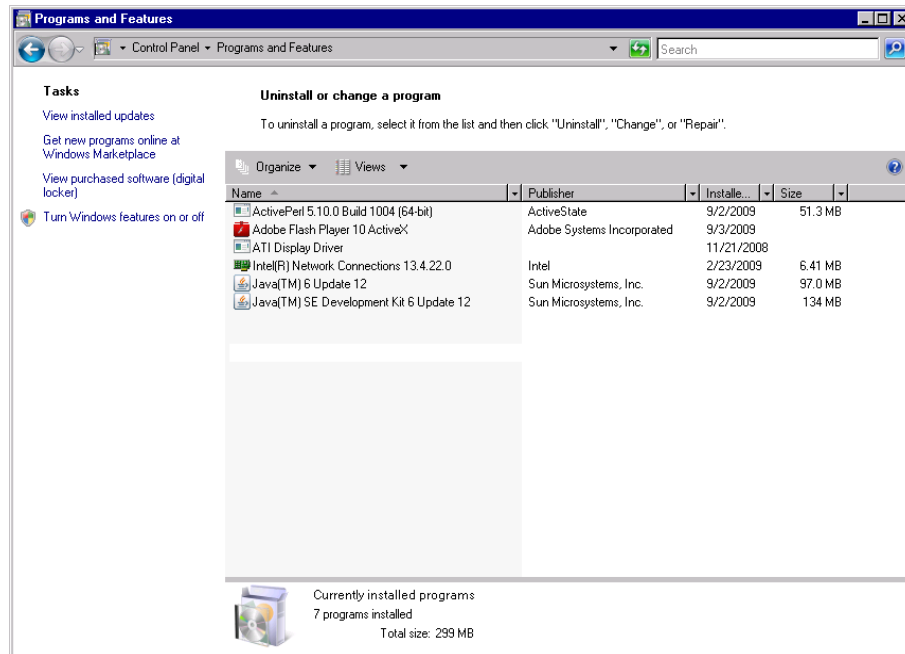


Notice: It is all right when you press the [OK] button. And follow the steps below.

- (7) Check the result and close the window

[Apache Tomcat 6.0 (remove only)] in 'Programs and Features' window was deleted.

Close the window.



Notice: After uninstallation of Tomcat is finished, you must next complete the procedure in “5.2.2 Installation of Tomcat” before modifying any other software product on the SVP. If you shutdown or logout the SVP before completion of “5.2.2 Installation of Tomcat”, SVP failure may occur. If a shutdown request message is displayed by the software product during uninstall/install, please disregard.

5.2.2 Installation of Tomcat

When installing Tomcat, follow the procedure shown below. Be sure to check that the uninstallation processing is completed before installing it.

Installed Tomcat version is different by OSS version. Refer to the following.

Table 5.2.2-1 Installed Tomcat Properties

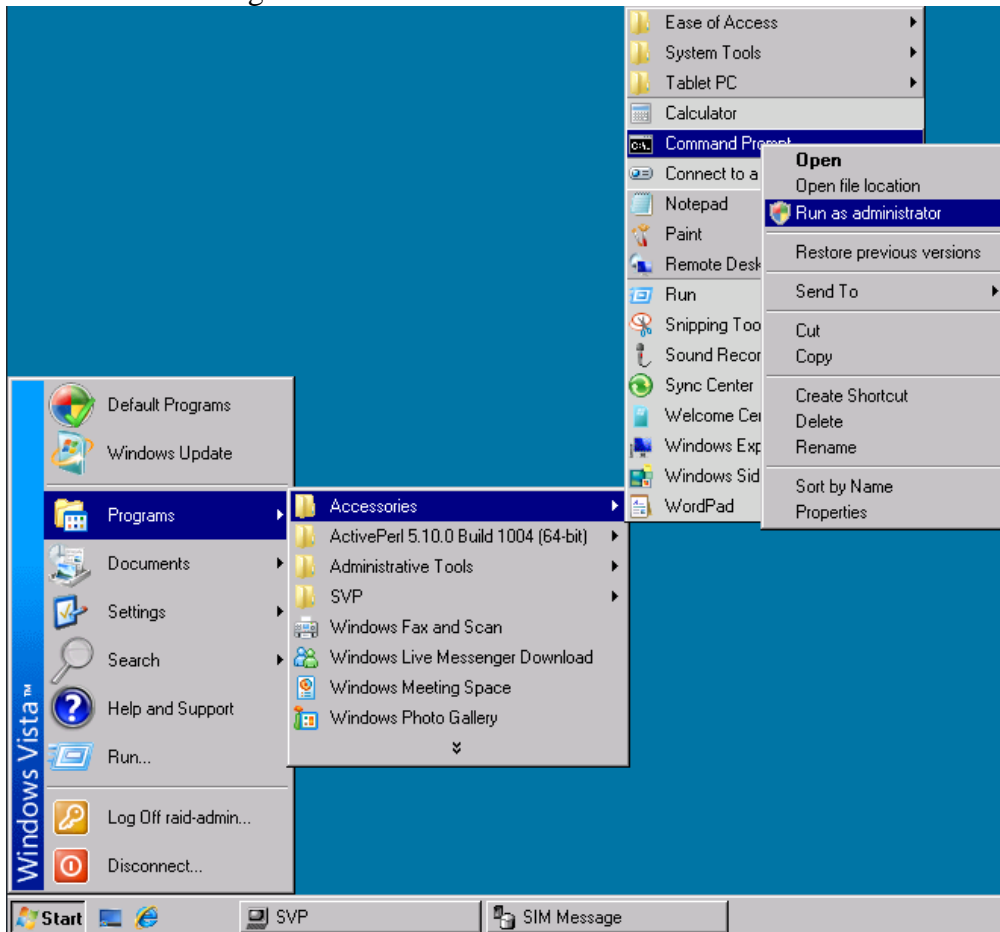
OSS Versions	Tomcat Versions	Conditions
70-01-00/00 ~	Tomcat 6.0.16	<ul style="list-style-type: none">• Get ready OSS media version 70-06-05/xx less than 70-01-00/00 or later.• SVP version is 70-01-01/00 or later.• Tomcat is uninstalled.
70-06-05/xx ~	Tomcat 6.0.41	<ul style="list-style-type: none">• Get ready OSS media version 70-06-05/xx or later.• SVP version is 70-06-15/00 or later.• Tomcat is uninstalled.

(1) Mount the OSS media

Insert the OSS media (the second media) to the CD-ROM drive in the Console PC.

(2) Launch the Command Prompt as administrator

Select (CL) [Start]-[Programs]-[Accessories], and launch the Command Prompt with 'Run as administrator' in right-click menu.



(3) Launch the installation batch

Enter “\\tsclient\<drive letter>\JavaAp\install_Vista64_Tomcat.bat” into the Command Prompt, and press the Enter key.

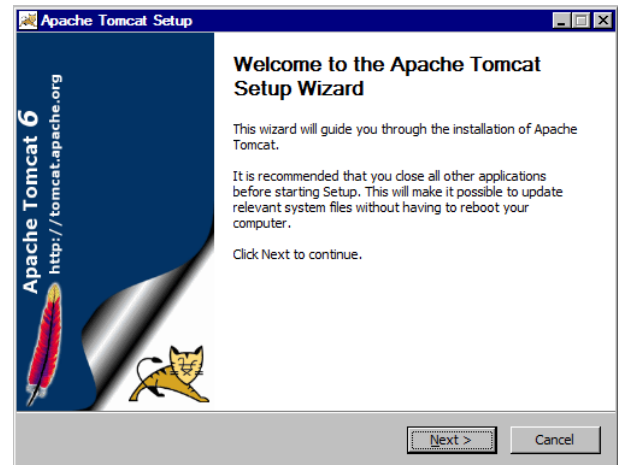
Note: The input value is the form of

“\\tsclient\<drive letter>\JavaAp\install_Vista64_Tomcat.bat”.

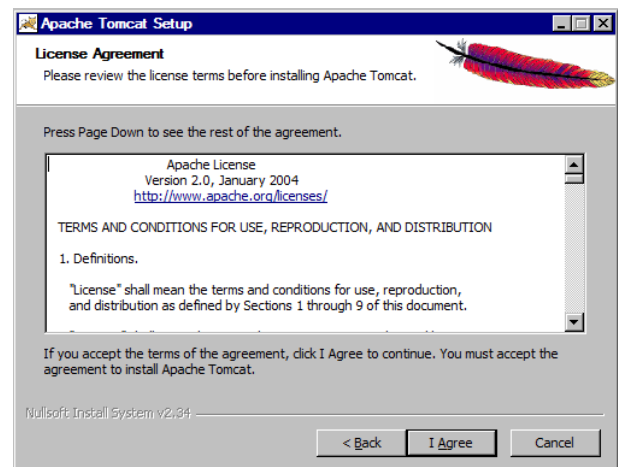
A drive letter is made the drive which inserted the OSS media.

The above is a case where the CD-ROM drive is assigned a drive letter E.

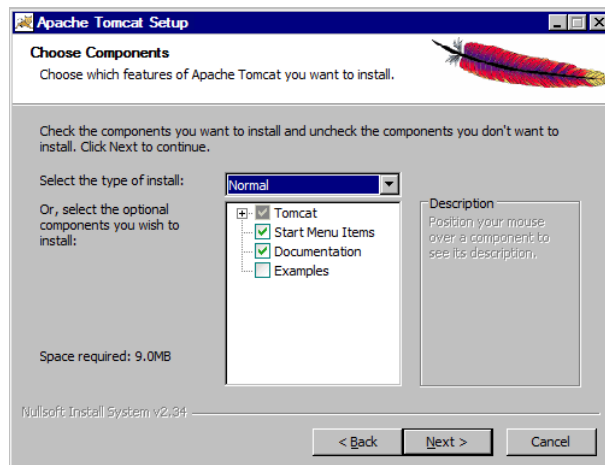
- (4) Proceed to the next
Select (CL) [Next>].



- (5) Proceed to the next
Select (CL) [I Agree].

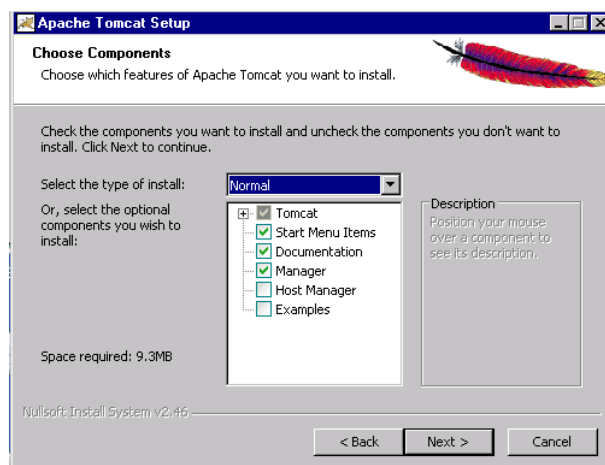


- (6) Proceed to the next
Select (CL) [Next>].



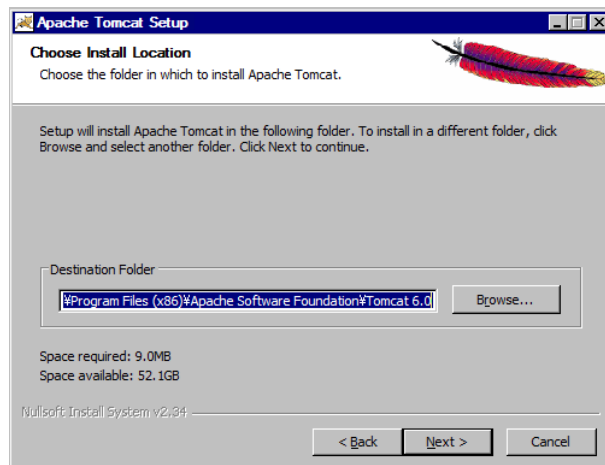
This screen is displayed in OSS version
70-06-05/xx or later.

Select (CL) [Next>].



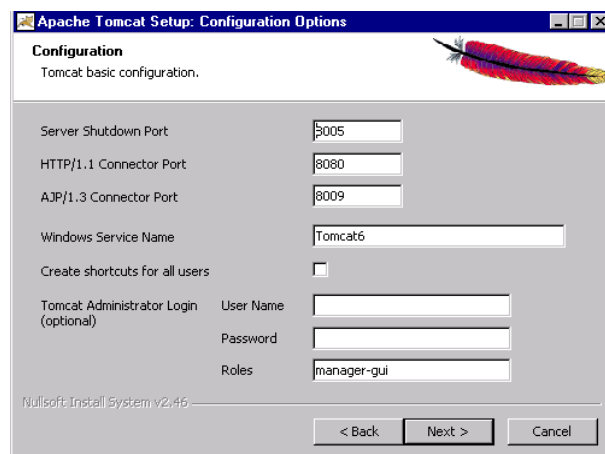
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- (7) Proceed to the next
Select (CL) [Next>].

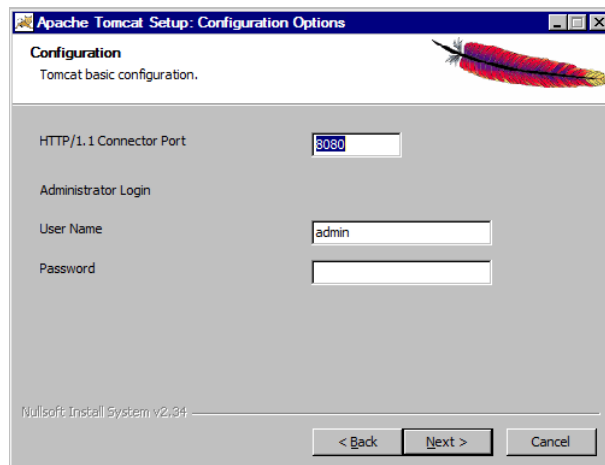


This screen is displayed in OSS version
70-06-05/xx or later.

Select (CL) [Next>].

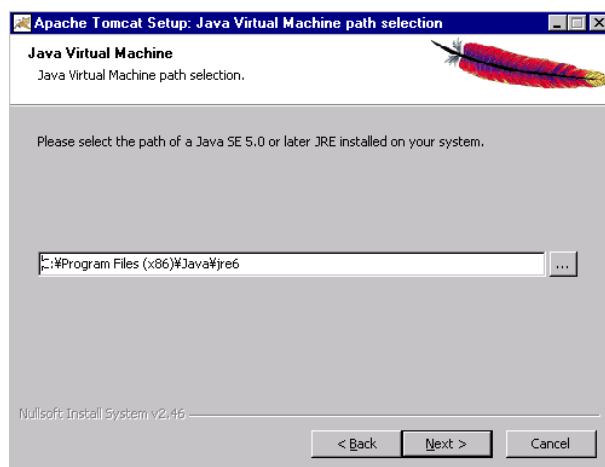


- (8) Proceed to the next
Select (CL) [Next>].

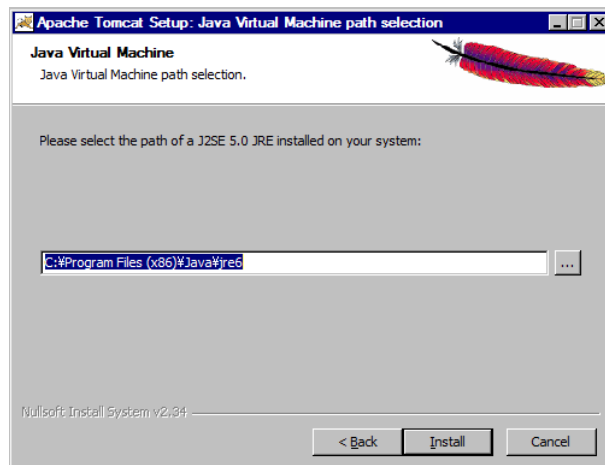


This screen is displayed in OSS version
70-06-05/xx or later.

Select (CL) [Next>].

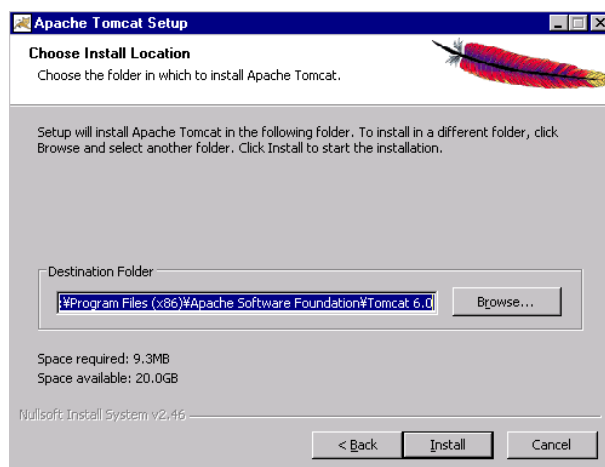


- (9) Proceed to the next
Select (CL) [Install].

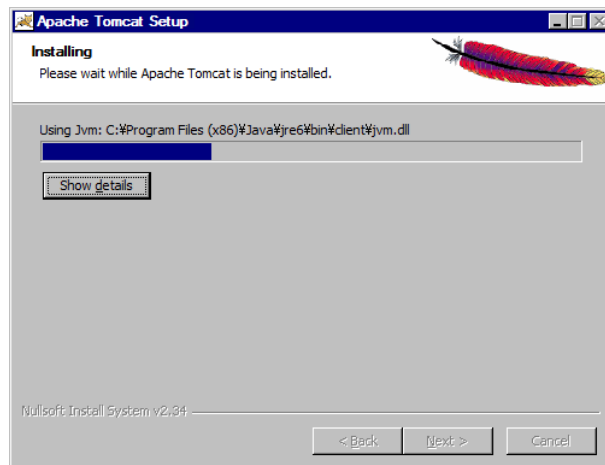


This screen is displayed in OSS version
70-06-05/xx or later.

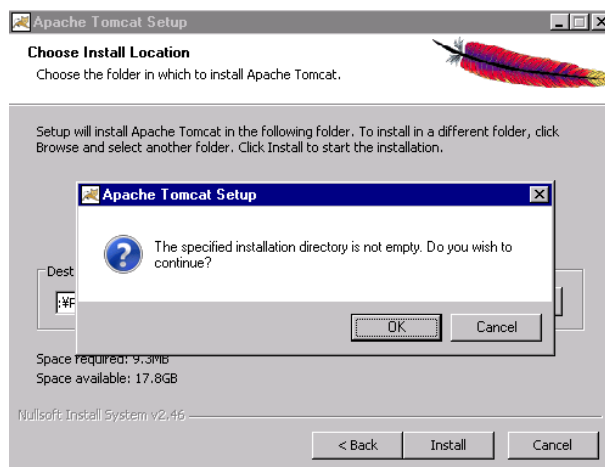
Select (CL) [Install].



(10) Wait while installing

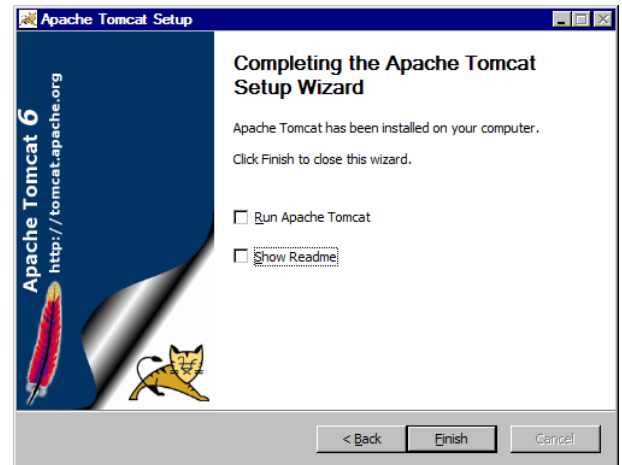


If following error message is displayed, not select (CL) [OK] button. And follow the steps below.

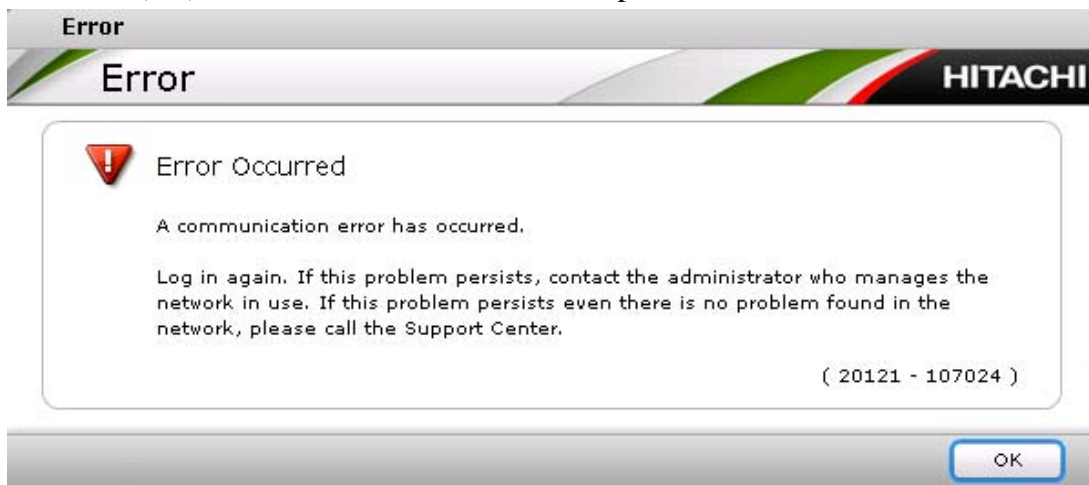


(11) Finishing installation

Uncheck all the checkboxes, and select (CL) [Finish].



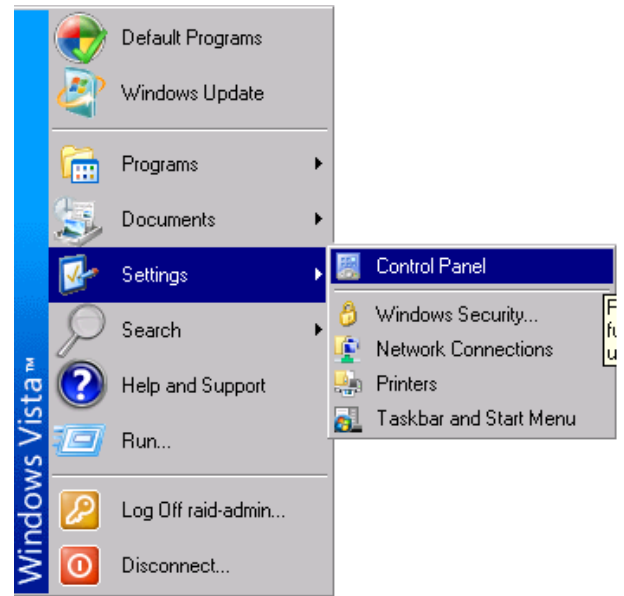
If following error message is displayed on the Web Console, not select (CL) [OK] button. And follow the steps below.



Notice: It is all right when you press the [OK] button. And follow the steps below.

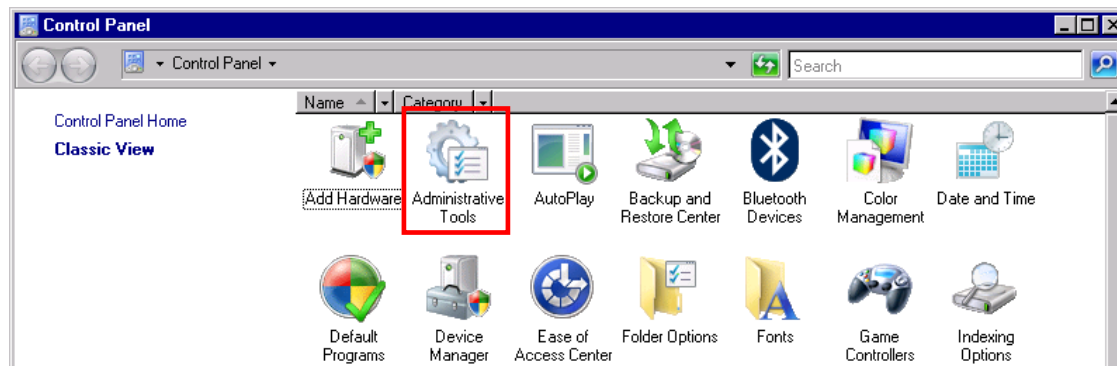
(12) Open Control Panel

Select (CL) [Start]-[Settings]-[Control Panel].



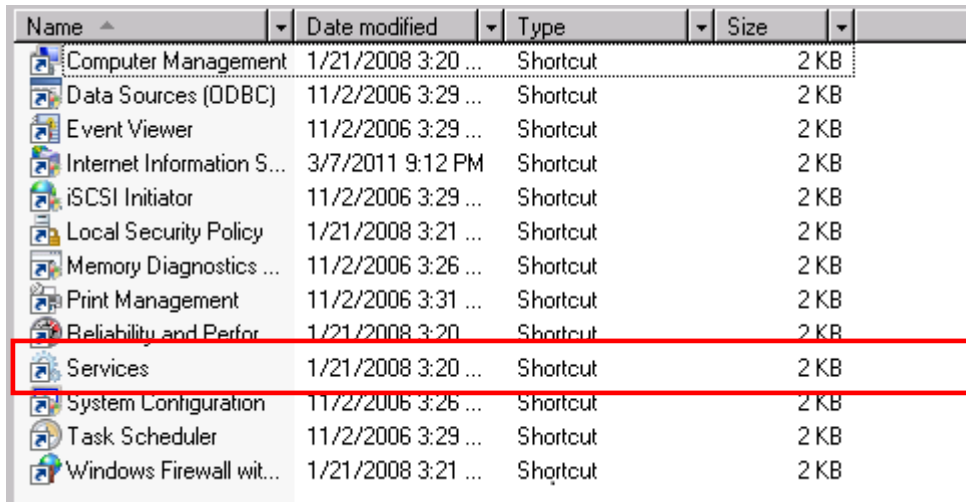
(13) Open Administrative Tools

Select (DC) “Administrative Tools”.



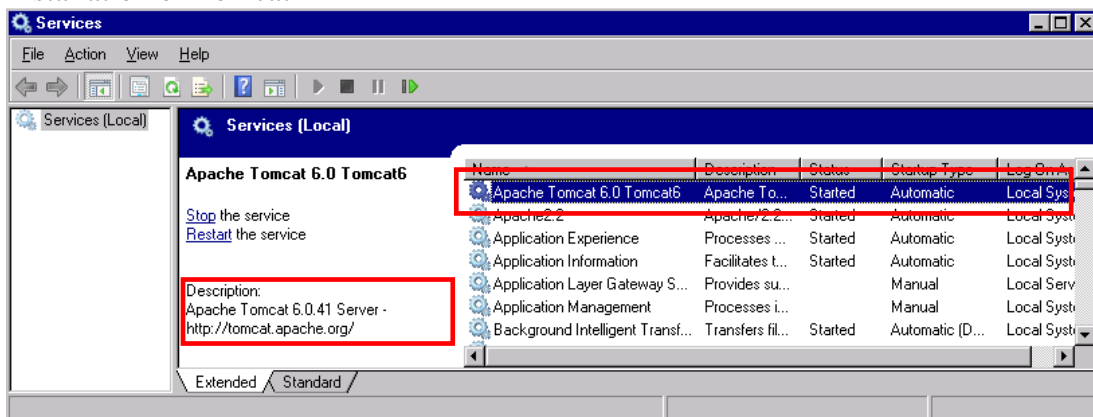
(14) Open Services

Select (DC) “Services”.



(15) Select (CL) “Apache Tomcat 6.0 Tomcat6”, and confirm installed Apache Tomcat version.

Installed Tomcat version refer to “Table 5.2.2-1 Installed Tomcat Properties” of “5.2.2 Installation of Tomcat”



Notice: • If there is no “Apache Tomcat 6.0 Tomcat6” in “Name” list, try again from the installation procedure (1). If you shutdown or logout the SVP before completion of “Installation of Apache Tomcat”, SVP failure may occur. If a shutdown request message is displayed by the software product during uninstall/install, please disregard.

- In addition, if the installed version is different from the version you expect, please reboot the SVP. And try again from installation procedure “5.2.1 Uninstallation of Tomcat”.

(16) Unmount the OSS media

Remove the OSS media (the second media) from the CD-ROM drive in the Console PC.

(17) Reboot the SVP

Select (CL) [Start]-[Run...].

Enter “shutdown /r /t 0” and press the Enter key.

The SVP will be rebooted.

Notice: • When the SVP High Reliability Kit is installed, you need to install it for the standby SVP in the same procedure.

About the switching SVP, refer to Post-Procedure “2.18. SVP Switching” in the “SVP SECTION” ([SVP02-1420](#)).

- When installed Tomcat 6.0.41 (OSS versions 70-06-05/xx or later) in SVP, not downgrade SVP version less than 70-06-15/00.

When downgrade SVP version less than 70-06-15/00, must install Tomcat version Tomcat 6.0.16 (OSS version less than 70-06-05/xx) before.

(Refer to “5.2.1 Uninstallation of Tomcat” ([WEB05-30](#)) and “5.2.2 Installation of Tomcat” ([WEB05-61](#)))

- If SVP is downgraded to less than 70-06-15/00 after installing Tomcat 6.0.41 (OSS media version 70-06-05/xx or later), SVP failure may occur.
If SVP failure occurs, please refer to Technical Support Division.

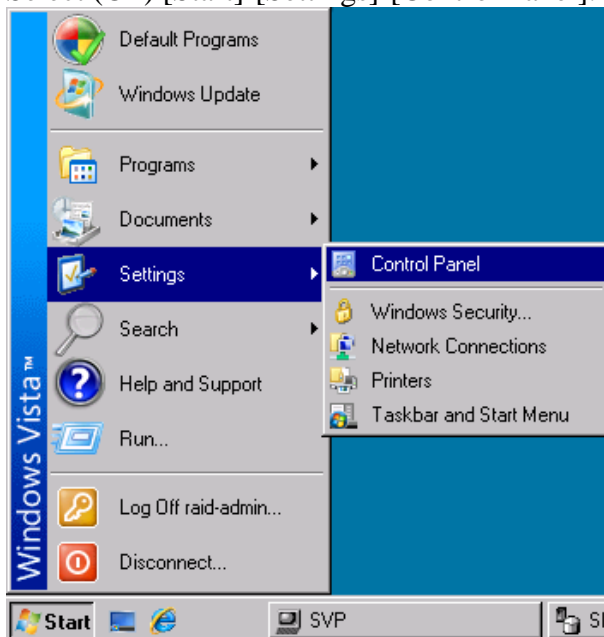
5.3 Flash Player

5.3.1 Uninstallation of Flash Player

Before reinstalling Flash Player, you need to uninstall the Flash Player already installed in the SVP. Uninstall the Flash Player in the following procedure.

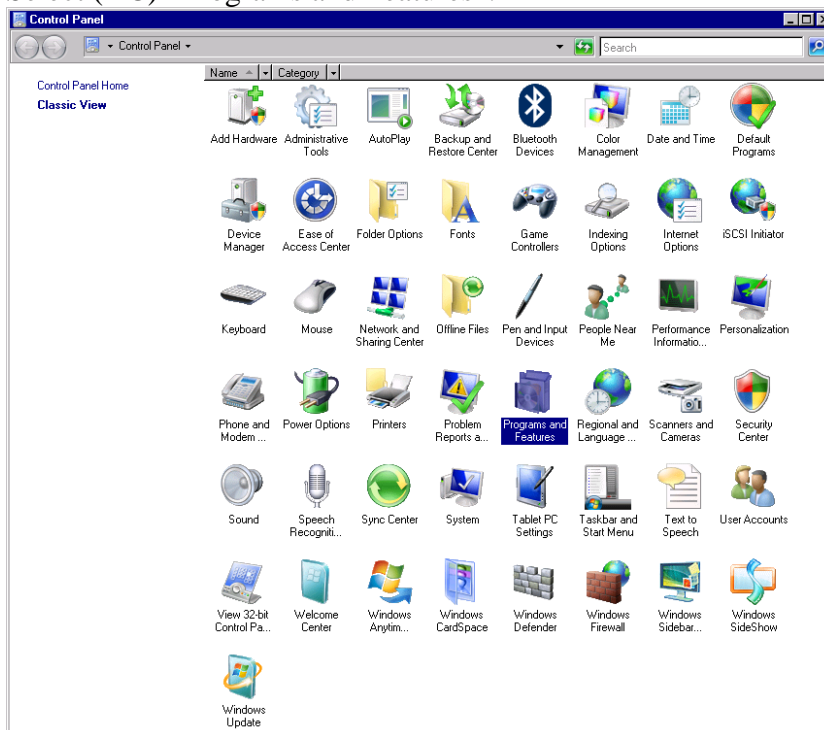
(1) Open Control Panel

Select (CL) [Start]-[Settings]-[Control Panel].



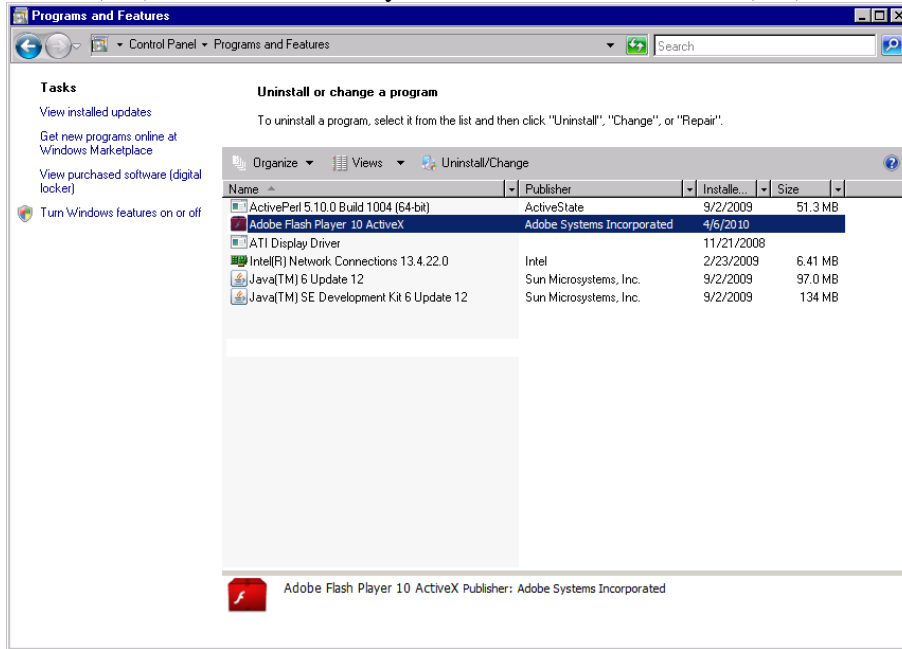
(2) Open Program and Features

Select (DC) "Programs and Features".



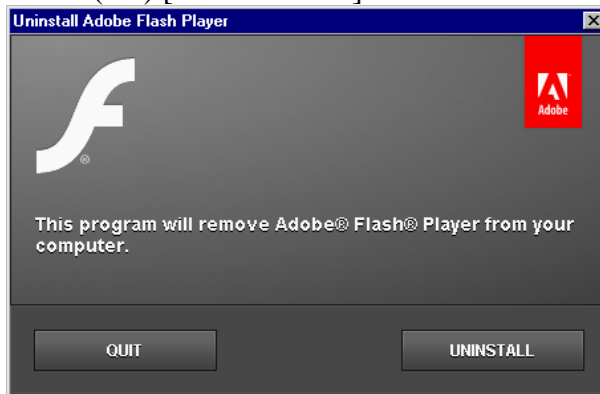
(3) Run uninstallation

Select (CL) [Adobe Flash Player 10 ActiveX], and select (CL) [Uninstall/Change].



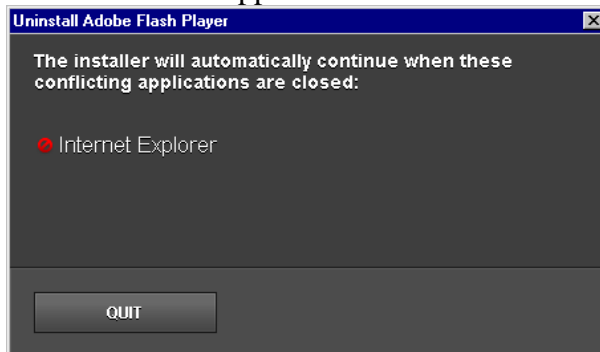
(4) Starting uninstallation

Select (CL) [UNINSTALL].



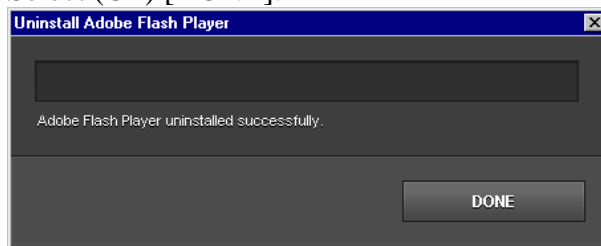
(5) Finishing application

If some applications were using Flash Player, the application name is displayed. Please finish the applications.



(6) Finishing uninstallation

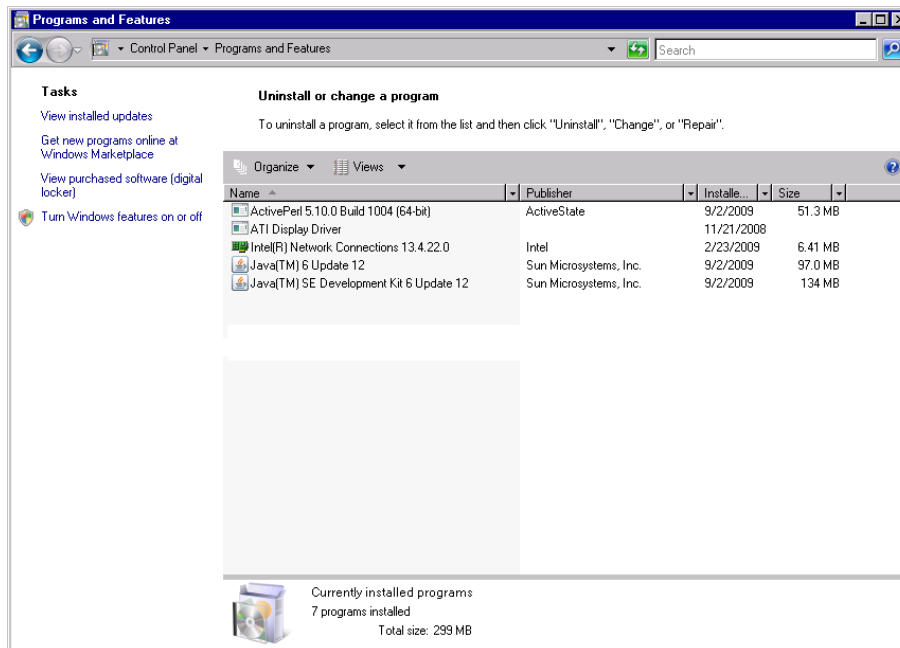
Select (CL) [DONE].



(7) Check the result and close the window

[Adobe Flash Player 10 ActiveX] in 'Programs and Features' window was deleted.

Close the window.



5.3.2 Installation of Flash Player

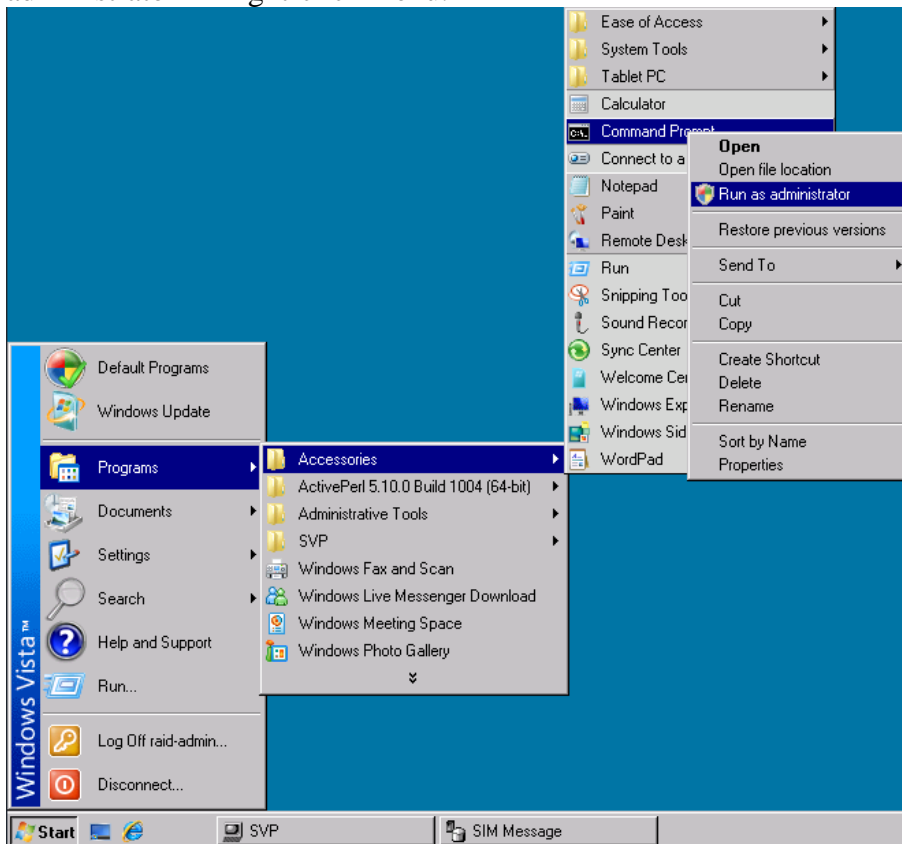
When installing Flash Player, follow the procedure shown below. Be sure to check that the uninstallation processing is completed before installing it.

(1) Mount the OSS media

Insert the OSS media (the second media) to the CD-ROM drive in the Console PC.

(2) Launch the Command Prompt as administrator

Select (CL) [Start]-[Programs]-[Accessories], and launch the Command Prompt with 'Run as administrator' in right-click menu.



(3) Launch the installation batch

Enter “\\tsclient\<drive letter>\JavaAp\install_Vista64_Flash.bat” into the Command Prompt, and press the Enter key.

Note: The input value is the form of

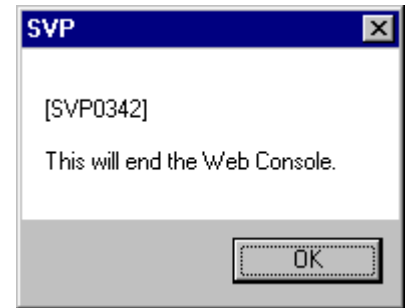
“\\tsclient\<drive letter>\JavaAp\install_Vista64_Flash.bat”.

A drive letter is made the drive which inserted the OSS media.

The above is a case where the CD-ROM drive is assigned a drive letter E.

(4) Finishing Web Console

If running Web Console, “This will end the Web Console.” message is appeared.
Select (CL) [OK].



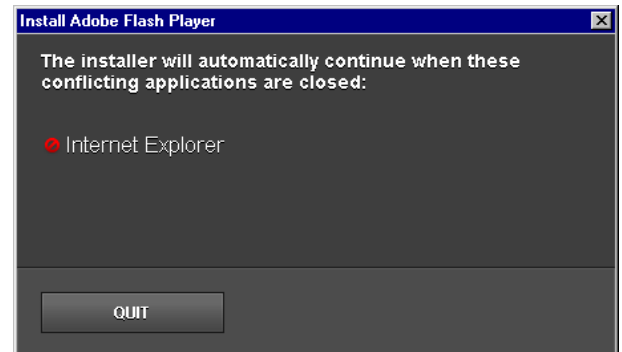
(5) Starting installation

Select (CL) [I have read and agree to the terms of the license agreement.], and select (CL) [INSTALL].



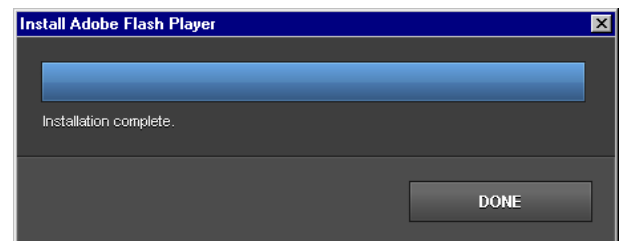
(6) Finishing application

If some applications were using Flash Player, the application name is displayed.
Please finish the applications.



(7) Finishing installation

Select (CL) [DONE].



5.4 Procedure of Java update / downgrade

5.4.1 Java 1.6.0_45 update

SVP can be installed Java 1.6.0 update 45 when SVP micro version 70-06-11/00 or more is. Before you downgrade java, must confirm that Storage Navigator is displayed. And close application other than SVP.

Precondition:

- Prepare the media on and after OSS Ver 70-06-02/00.
- SVP version must be on and after 70-06-11/00.

Note: Don't the following instructions. SVP failure may occur.

If SVP failure occurs, please refer to Technical Support Division.

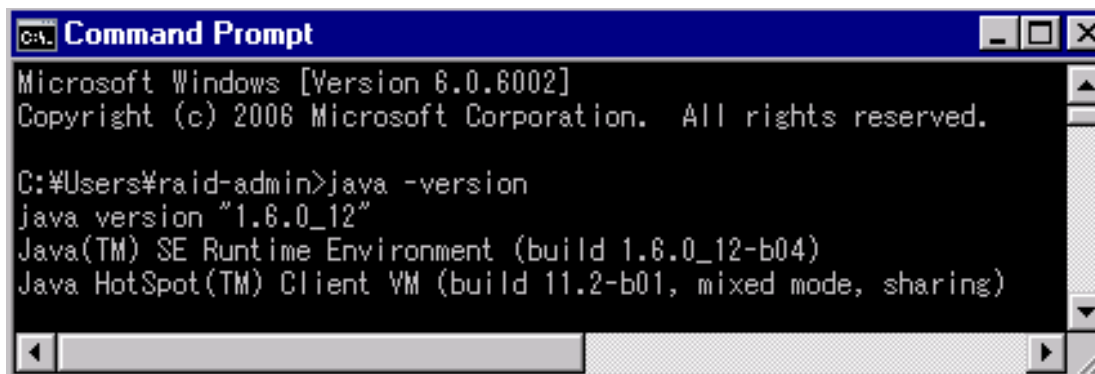
- Not interrupt until step (20).
- Not disconnect a SVP session until update is completed.
- Must not reboot during java update.

(1) Open the [Command Prompt]

Select (CL) [Start]-[Programs]-[Accessories], and launch the Command Prompt.

(2) Confirm Java version

Enter "java -version" into the Command Prompt, and confirm Java version 1.6.0_12.



```
Microsoft Windows [Version 6.0.6002]
Copyright (c) 2006 Microsoft Corporation. All rights reserved.

C:\Users\raid-admin>java -version
java version "1.6.0_12"
Java(TM) SE Runtime Environment (build 1.6.0_12-b04)
Java HotSpot(TM) Client VM (build 11.2-b01, mixed mode, sharing)
```

- (3) Open SVP screen
 Select (CL) [Maintenance]-[Maintenance Components (General)].

Hitachi Storage Navigator

Web Console

File Maintenance Actions Reports Settings View Help

Alert Audit Log Resource Unlocked Logged in as: maintenance

Maintenance Components (General)

Last Updated: 2014/03/01 15:44 Refresh View Help

Explorer

Storage Systems

RAID800(S/N:64545)

Tasks Reports Components Parity Groups Logical Devices Pools Ports/Host Groups External Storages Replications

RAID800(S/N:64545)

Hardware Summary

Storage System Name	RAID800	Microcode Version	Main	70-06-15-00/00
Storage System Type	VSP	SVP		70-06-10/00
Serial Number	64545	RMI Server		07_09_00
IP Address	localhost	Total Cache Size		22.00 GB
Contact	RSD			
Location	HSP			

Edit Storage System

Allocation Summary

Internal/External: Total Open/Mainframe: Total Capacity Unit: Appropriate

Physical Summary

Physical Capacity	Number of Physical Logical Devices
Allocated	2
Reserved	9
Used DP Pool	-
Unused DP Pool	0
Other	1010
Available Space	-
Unallocated	1021
Free Space	-
Physical Total	1021

Virtual Summary

Virtual Capacity	Number of Virtual Logical Devices
DP Allocated	0
DP Unallocated	1
Other	2
Virtual Total	3

Total DP Subscription Rate:31% Total Number of LDEVs:1024(Max Allowed:65280)

Performance Monitor

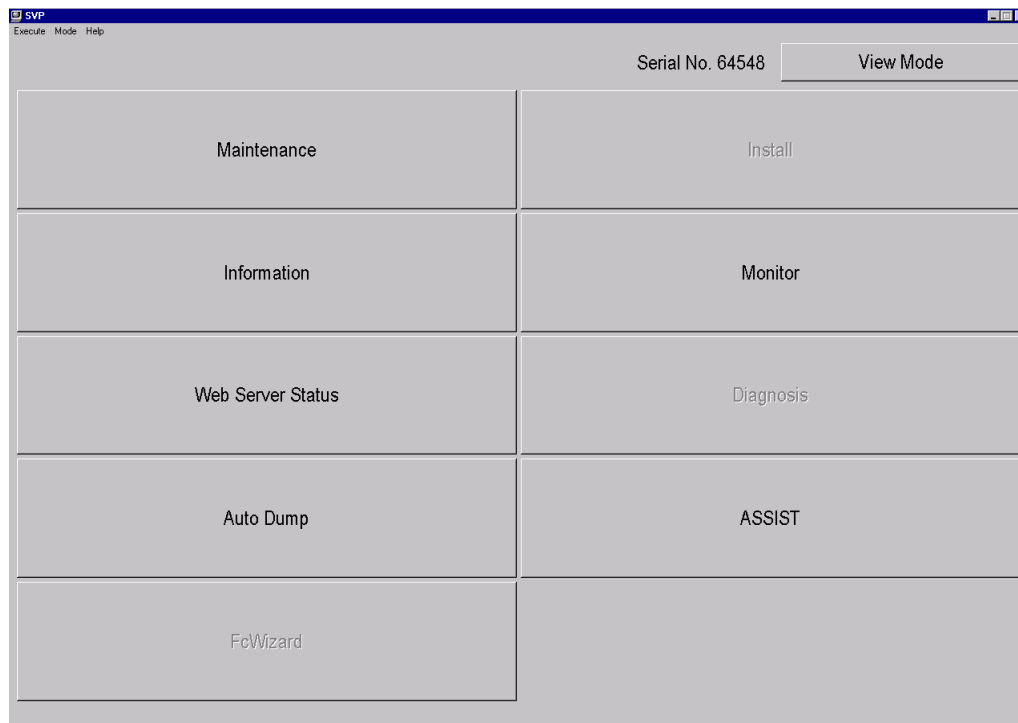
Administration

General Tasks

Create Host Groups Create LDEVs Add LUN Paths Create Pools Add External Volumes Create Pairs Create Configuration Report Monitor Performance

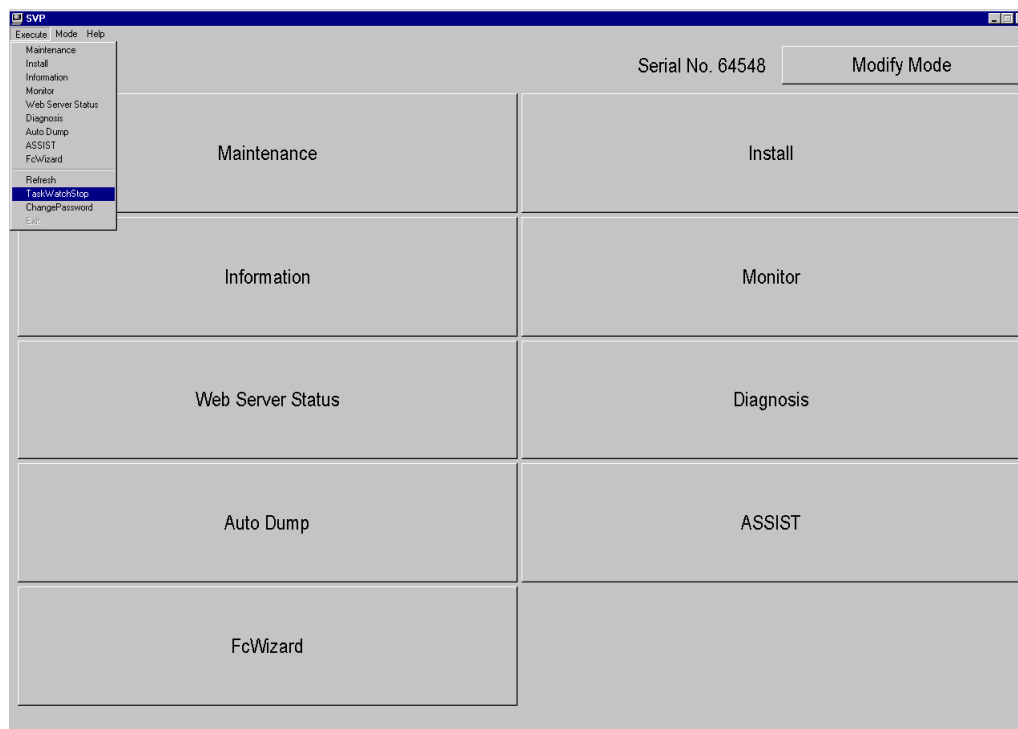
(4) Change [Modify Mode]

Select (CL) [View Mode] button then change [Modify Mode].



(5) Enable TaskWatchStop

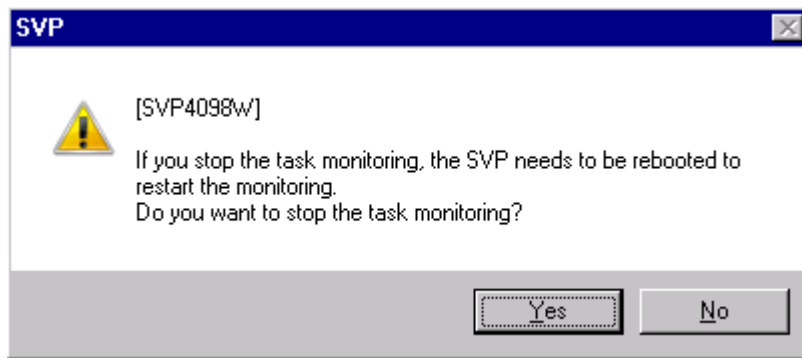
Select (CL) [Execute]-[TaskWatchStop] in [Modify Mode].



Note: Must Enable TaskWatchStop, because might cause of failure of SVP.

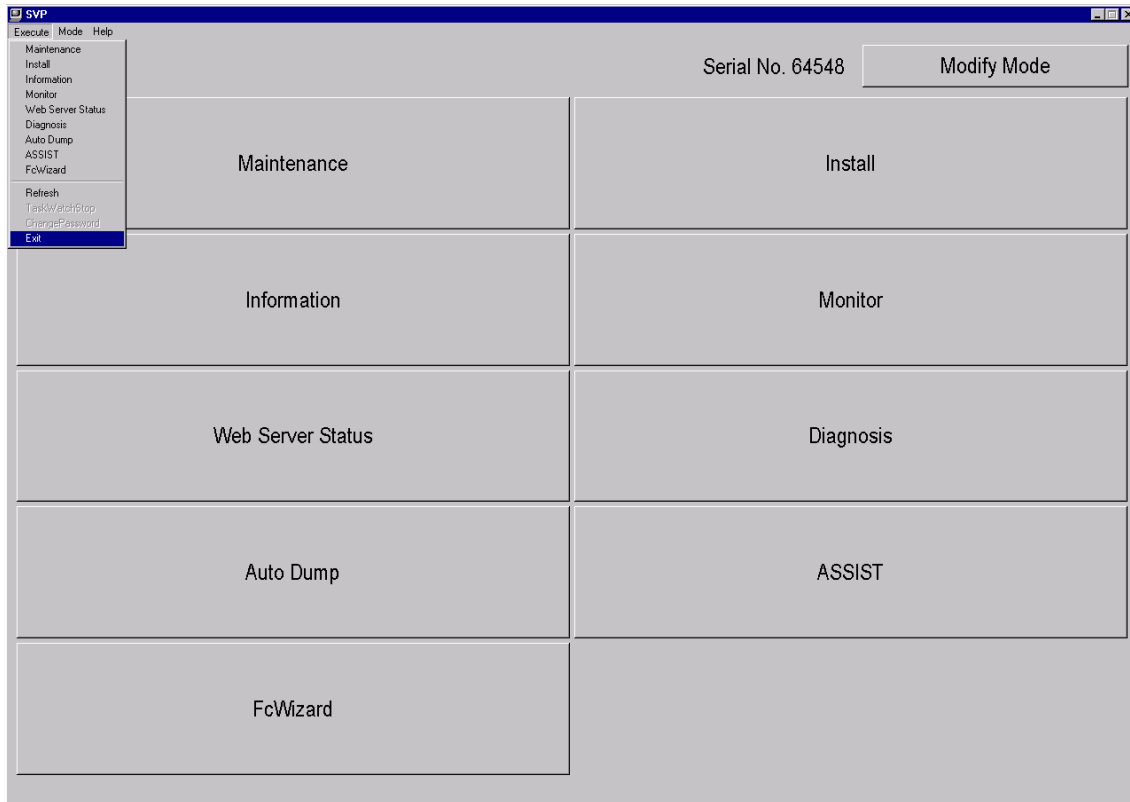
(6) Confirm TaskWatchStop

If following message box is displayed, select (CL) [Yes] button.



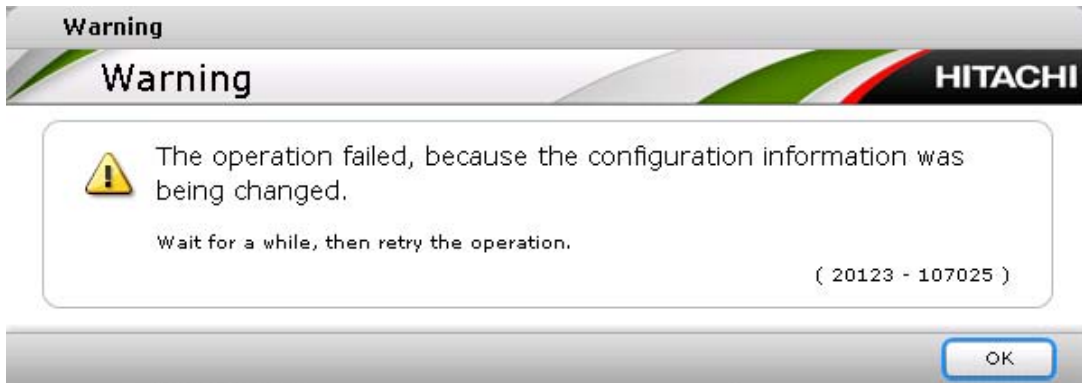
(7) Close SVP screen

Select (CL) [Modify Mode] button then change [View Mode]. And select (CL) [View Mode] button then change [Modify Mode]. Select (CL) [Execute]-[Exit] after confirm that [Execute]-[TaskWatchStop] cannot click.



Note: Don't forget close SVP screen. Must not forget close SVP screen. Might cause of uninstall failure of Java.

If following warning message is displayed on the Web Console, not select (CL) [OK] button. And follow the steps below.



Notice: It is all right when you press the [OK] button. And follow the steps below.

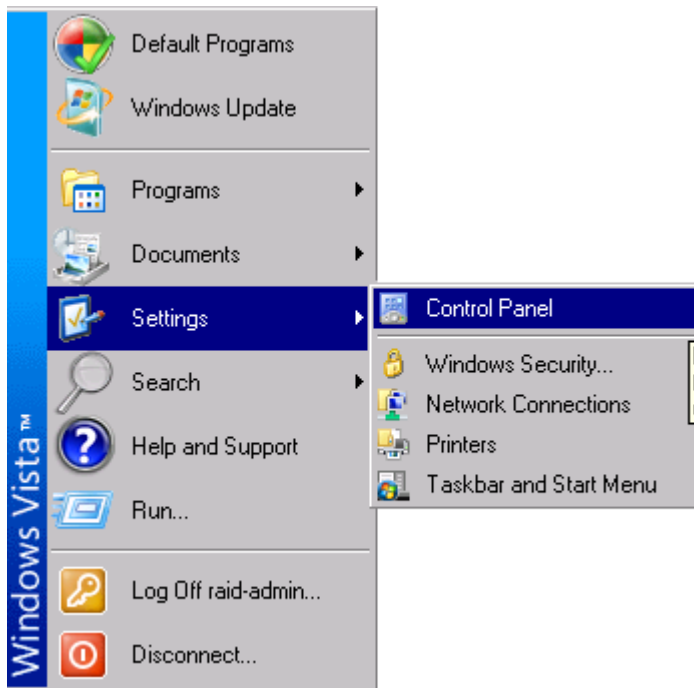
(8) Stop Tomcat Service

Stop Tomcat Service steps will be (9) ~ (14).

If OSS version 70-06-05/xx or later, go to step (15).

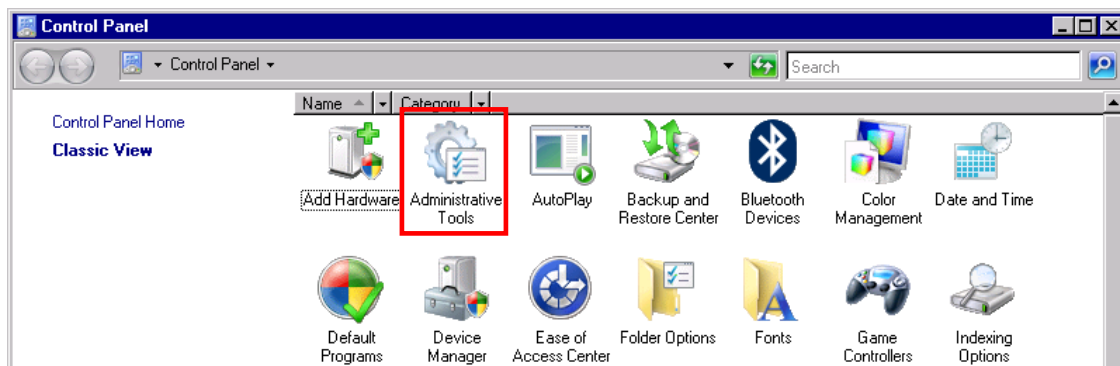
(9) Open Control Panel

Select (CL) [Start]-[Settings]-[Control Panel].



(10) Open Administrative Tools

Select (DC) “Administrative Tools”.



(11) Open Services

Select (DC) “Services”.

Name	Date modified	Type	Size
Computer Management	1/21/2008 3:20 ...	Shortcut	2 KB
Data Sources (ODBC)	11/2/2006 3:29 ...	Shortcut	2 KB
Event Viewer	11/2/2006 3:29 ...	Shortcut	2 KB
Internet Information S...	3/7/2011 9:12 PM	Shortcut	2 KB
ISCSI Initiator	11/2/2006 3:29 ...	Shortcut	2 KB
Local Security Policy	1/21/2008 3:21 ...	Shortcut	2 KB
Memory Diagnostics ...	11/2/2006 3:26 ...	Shortcut	2 KB
Print Management	11/2/2006 3:31 ...	Shortcut	2 KB
Reliability and Perfor...	1/21/2008 3:20 ...	Shortcut	2 KB
Services	1/21/2008 3:20 ...	Shortcut	2 KB
System Configuration	11/2/2006 3:26 ...	Shortcut	2 KB
Task Scheduler	11/2/2006 3:29 ...	Shortcut	2 KB
Windows Firewall wit...	1/21/2008 3:21 ...	Shortcut	2 KB

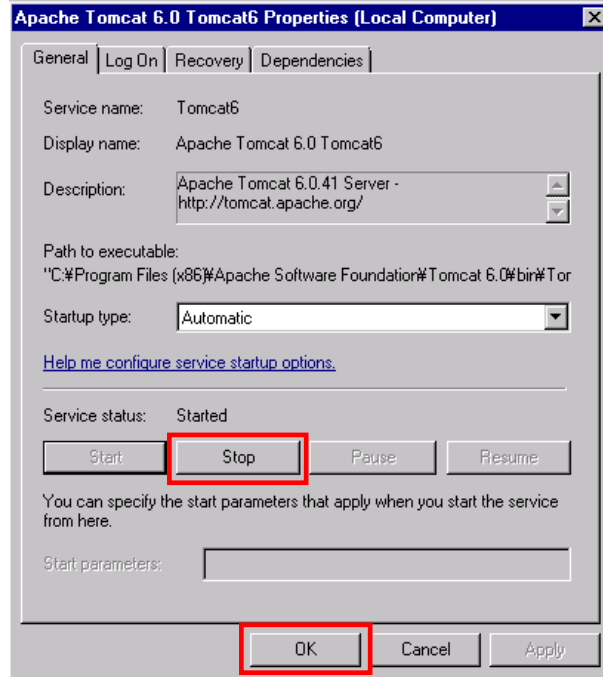
(12) Open Apache Tomcat 6.0 Tomcat6 Properties

Select (DC) “Apache Tomcat 6.0 Tomcat6”.

Services					
Services (Local)					
Apache Tomcat 6.0 Tomcat6					
Stop the service Restart the service					
Description: Apache Tomcat 6.0.41 Server - http://tomcat.apache.org/					
Name	Description	Status	Startup Type	Log On A...	
Apache Tomcat 6.0 Tomcat6	Apache To...	Started	Automatic	Local Sys...	
Apache2.2	Apache/2.2...	Started	Automatic	Local Syst...	
Application Experience	Processes ...	Started	Automatic	Local Syst...	
Application Information	Facilitates t...	Started	Automatic	Local Syst...	
Application Layer Gateway S...	Provides su...		Manual	Local Serv...	
Application Management	Processes i...		Manual	Local Syst...	
Background Intelligent Transf...	Transfers fil...	Started	Automatic (D...	Local Syst...	

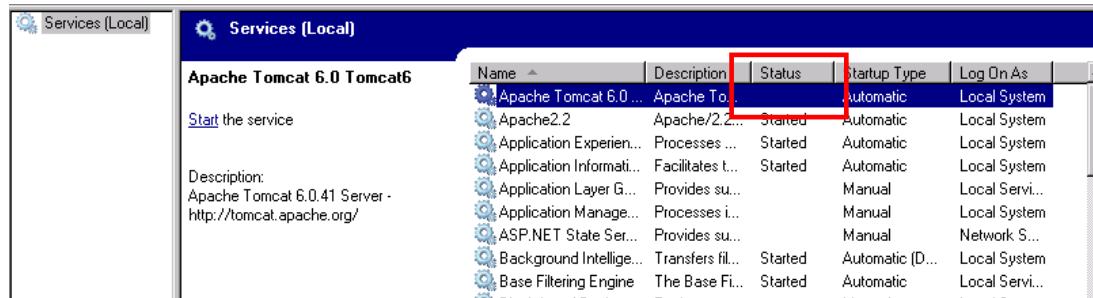
(13) Stop Service Apache Tomcat 6.0 Tomcat6

Select (CL) [Stop] button, Select (CL) [OK] button.



(14) Confirm Apache Tomcat 6.0 Tomcat6

Confirm that there is not the Apache Tomcat 6.0 Tomcat6 in "Status" list.

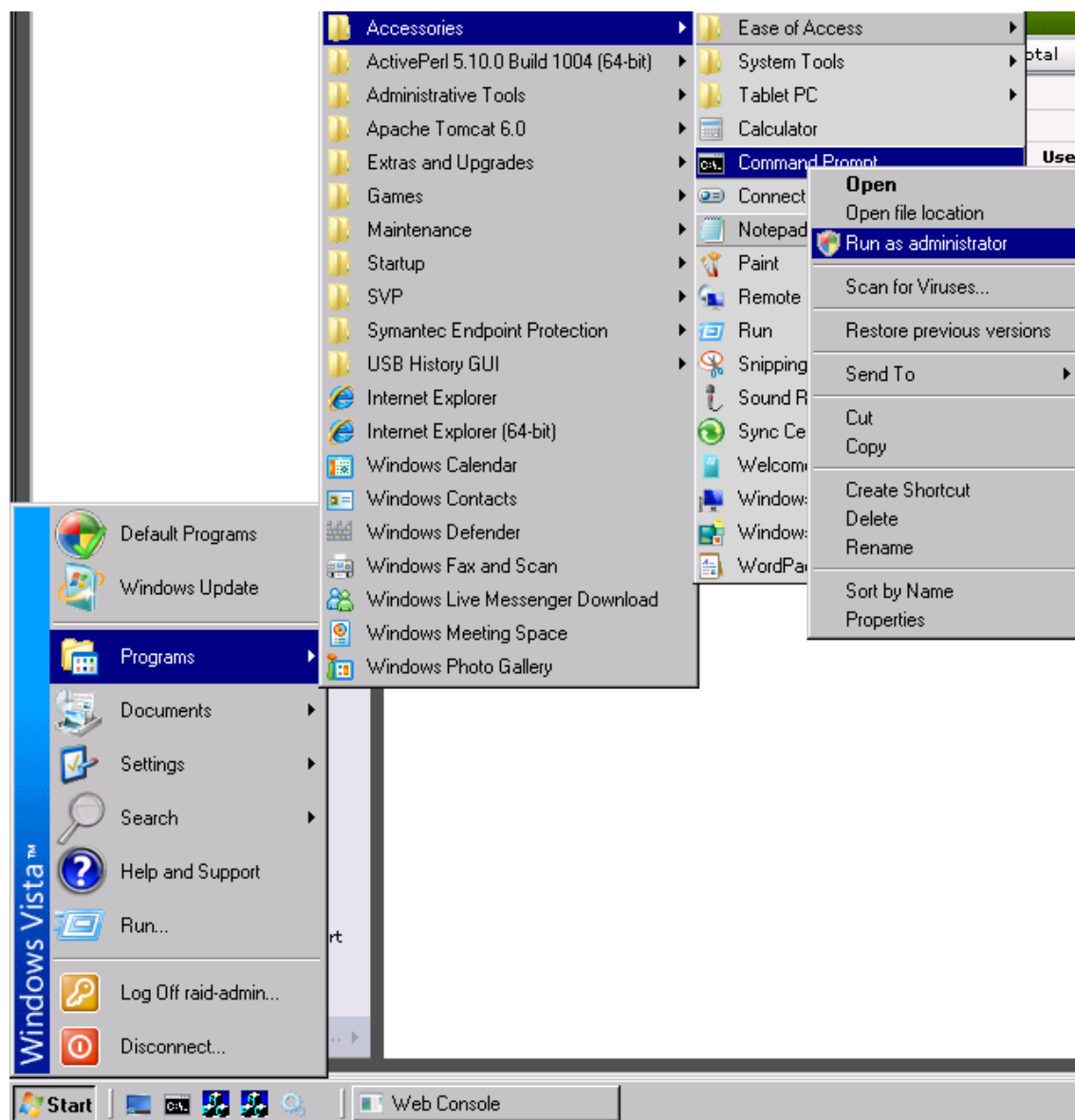


(15) Mount the OSS media

Insert the OSS media to the CD-ROM drive in the Console PC.

(16) Launch the Command Prompt as administrator

Select (CL) [Start]-[Programs]-[Accessories], and launch the Command Prompt with 'Run as administrator' in right-click menu.



(17) Launch the installation batch

Enter “\\tsclient\<drive letter>\JavaAp\JRE\JavaUpdate_V1.6.0_45.bat” into the Command Prompt, and press the Enter key.

At the end of this process, the Command Prompt will close automatically.

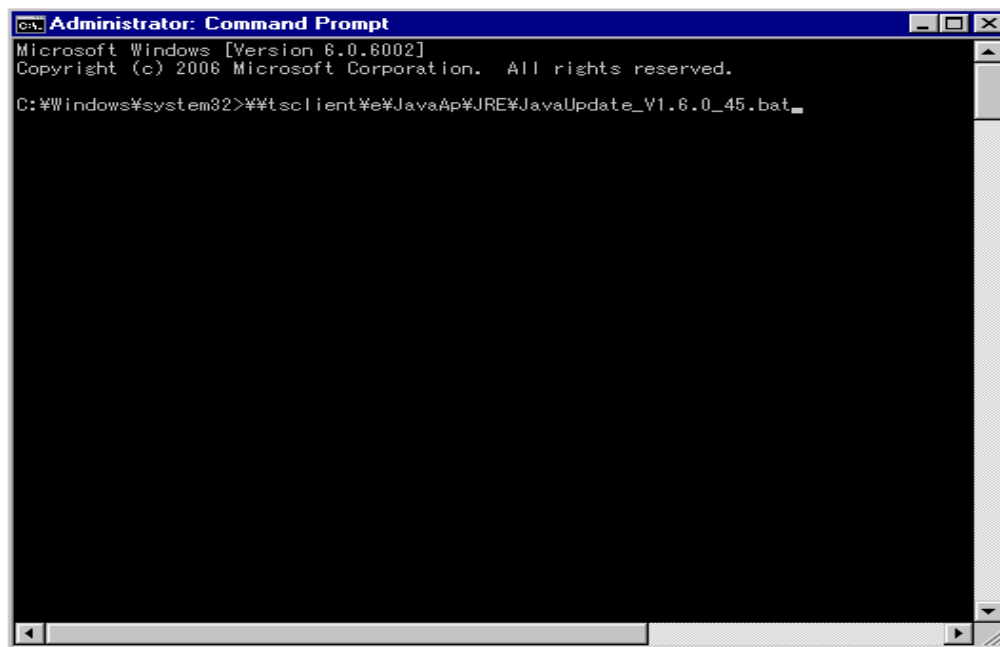
Note: •The input value is the form of

“\\tsclient\<drive letter>\JavaAp\JRE\JavaUpdate_V1.6.0_45.bat”.

A drive letter is made the drive which inserted the OSS media.

The above is a case where the CD-ROM drive is assigned a drive letter E.

•When Command Prompt did not close automatically, select [×], close the window.

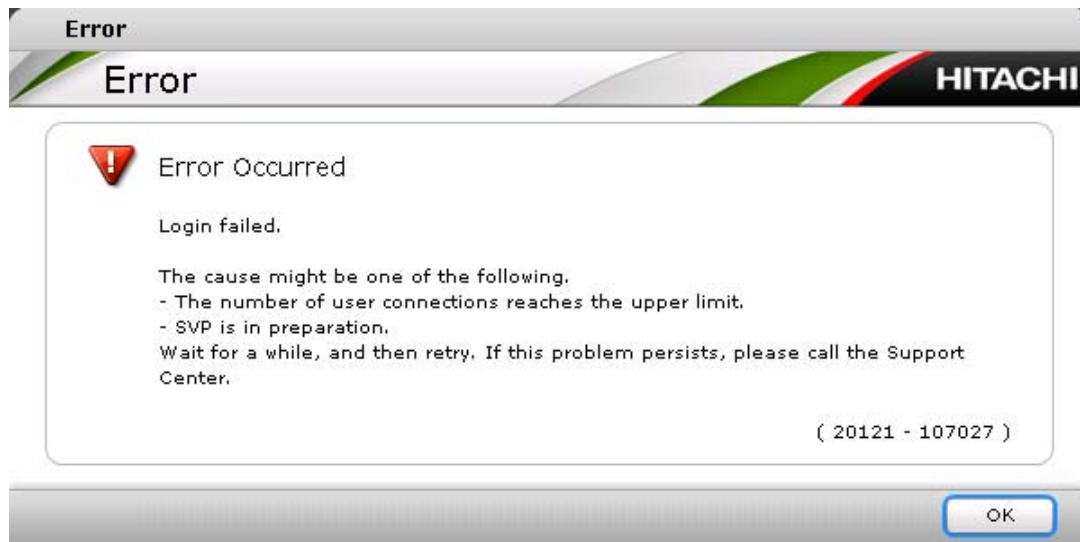


If following error message is displayed on the Web Console, not select (CL) [OK] button. And follow the steps below.



Notice: It is all right when you press the [OK] button. And follow the steps below.

After bat has finished, if following error message is displayed on the Web Console, not select (CL) [OK] button. And follow the steps below.



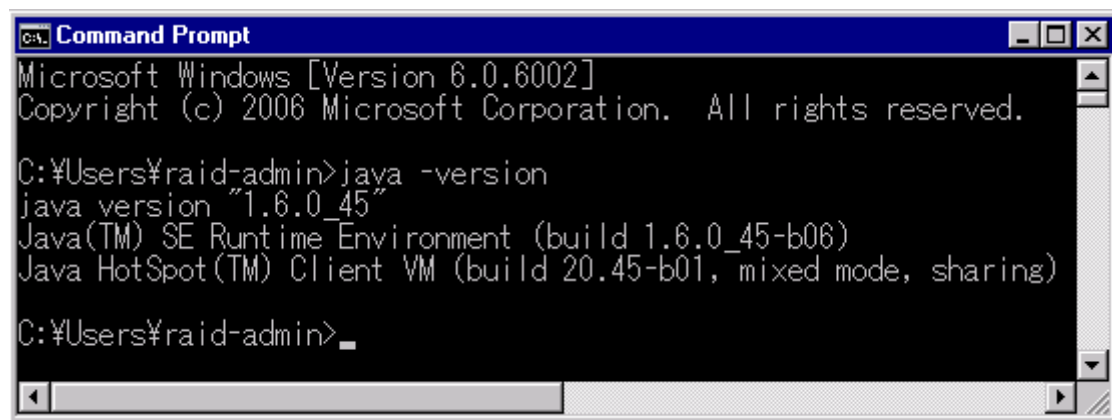
Notice: It is all right when you press the [OK] button. And follow the steps below.

(18) Open the [Command Prompt]

After bat has finished, select (CL) [Start]-[Programs]-[Accessories], and launch the Command Prompt.

(19) Confirm Java version

Enter "java -version" into the Command Prompt, and confirm Java version 1.6.0_45.



Notice: If Java version 1.6.0_12 is displayed in the Command Prompt, update is failed.

Select (CL) [JavaAp]-[JRE]-[setup] in OSS media, and launch [set.bat] with 'Run as administrator' in right-click menu.

At the end of this process, the Command Prompt will close automatically.

Follow the procedure of (20), and retry from step (1).

If Java version 1.6.0_12 is displayed in the Command Prompt again, refer to the Technical Support Division.

(20) Reboot SVP

Select (CL) [Start]-[Run...].

Enter “shutdown /r /t 0” into the Command Prompt, and select (CL) [OK] button.

Notice: After the java update, SVP version must not be changed to less than 70-06-11/00.

If SVP version is changed to less than 70-06-11/00, must downgrade java version 1.6.0_12. (Refer to “5.4.2 Java 1.6.0_12 downgrade” ([WEB05-210](#)))

After the java update, if SVP version is changed to less than 70-06-11/00, refer to the Technical Support Division.

5.4.2 Java 1.6.0_12 downgrade

Before you downgrade java, must confirm that Storage Navigator is displayed. And close application other than SVP.

Precondition: Prepare the media on and after OSS Ver 70-06-02/00.

Note: Don't the following instructions. SVP failure may occur.

If SVP failure occurs, please refer to Technical Support Division.

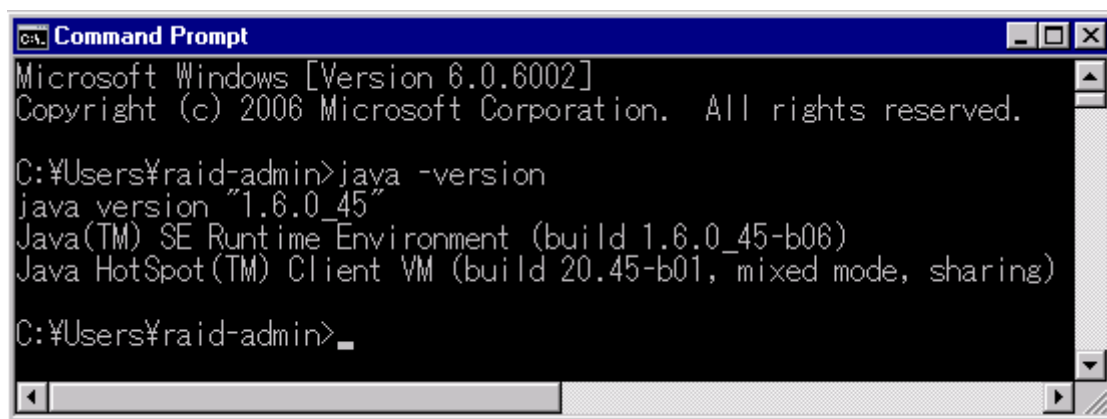
- Not interrupt until step (20).
- Not disconnect a SVP session until downgrade is completed.
- Must not reboot during java downgrade.

- (1) Open the [Command Prompt]

Select (CL) [Start]-[Programs]-[Accessories], and launch the Command Prompt.

- (2) Confirm Java version

Enter "java -version" into the Command Prompt, and confirm Java version 1.6.0_45.



```
Microsoft Windows [Version 6.0.6002]
Copyright (c) 2006 Microsoft Corporation. All rights reserved.

C:\Users\raid-admin>java -version
java version "1.6.0_45"
Java(TM) SE Runtime Environment (build 1.6.0_45-b06)
Java HotSpot(TM) Client VM (build 20.45-b01, mixed mode, sharing)

C:\Users\raid-admin>
```

- (3) Open SVP screen
 Select (CL) [Maintenance]-[Maintenance Components (General)].

Hitachi Storage Navigator

File Maintenance Actions Reports Settings View Help

Alert Audit Log Resource Unlocked Logged in as: maintenance

Explorer Maintenance Components (General) RAID800(S/N:64545) Last Updated: 2014/03/01 15:44 Refresh View Help

Storage Systems

RAID800(S/N:64545)

Hardware Summary

Storage System Name	RAID800	Microcode Version	Main	70-06-15-00/00
Storage System Type	VSP	SVP		70-06-10/00
Serial Number	64545	RMI Server		07_09_00
IP Address	localhost	Total Cache Size		22.00 GB
Contact	RSD			
Location	HSP			

Edit Storage System

Allocation Summary

Internal/External: Total Open/Mainframe: Total Capacity Unit: Appropriate

Physical Summary

Physical Capacity	Number of Physical Logical Devices
Allocated	2
Reserved	9
Used DP Pool	-
Unused DP Pool	0
Other	1010
Available Space	-
Unallocated	1021
Free Space	-
Physical Total	1.97 TB

Virtual Summary

Virtual Capacity	Number of Virtual Logical Devices
DP Allocated	0
DP Unallocated	1
Other	2
Virtual Total	3

Total DP Subscription Rate: 31% Total Number of LDEVs: 1024 (Max Allowed: 65280)

Performance Monitor

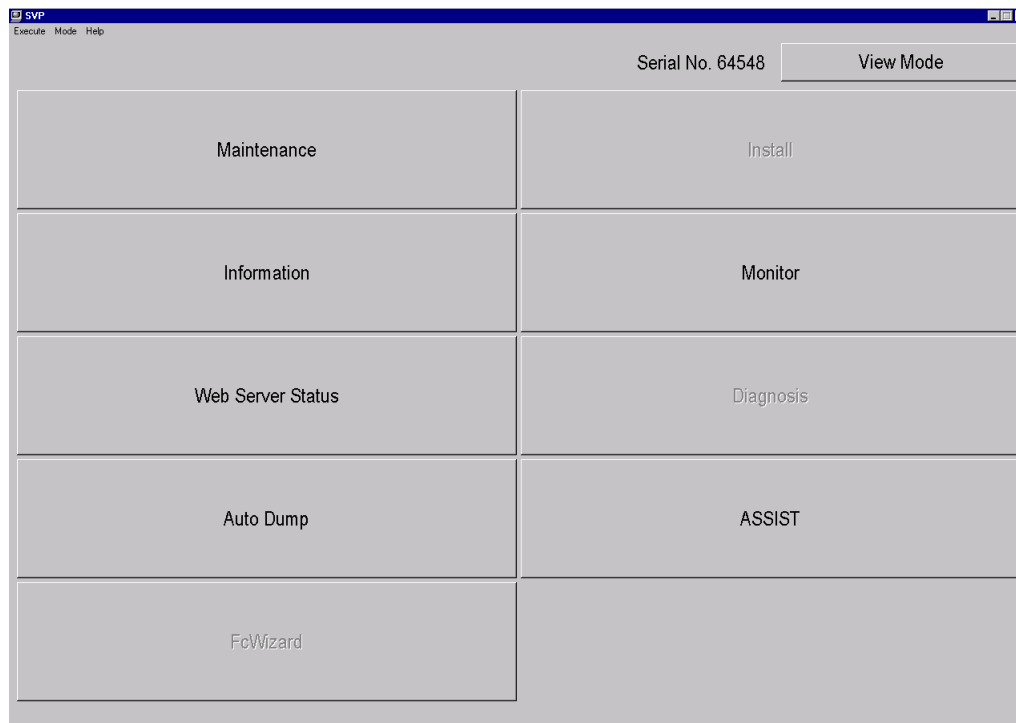
Administration

General Tasks

- Create Host Groups
- Create LDEVs
- Add LUN Paths
- Create Pools
- Add External Volumes
- Create Pairs
- Create Configuration Report
- Monitor Performance

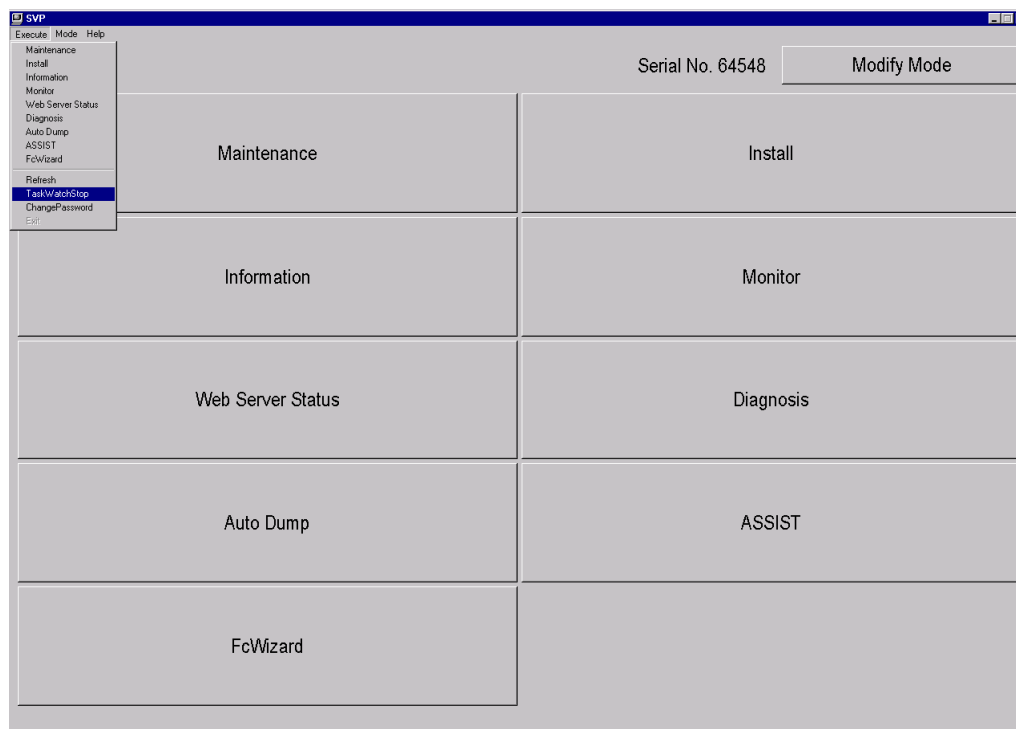
(4) Change [Modify Mode]

Select (CL) [View Mode] button then change [Modify Mode].



(5) Enable TaskWatchStop

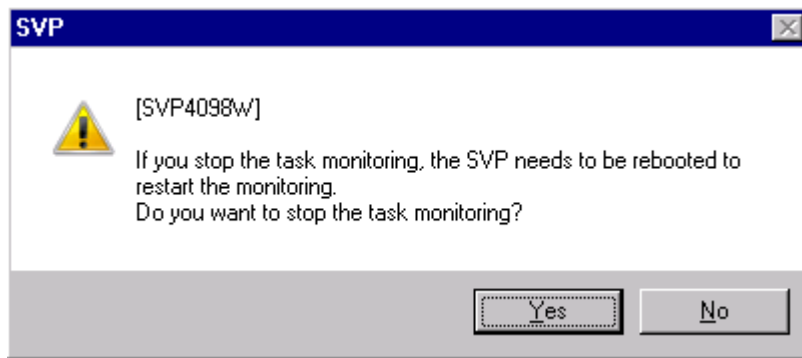
Select (CL) [Execute]-[TaskWatchStop] in [Modify Mode].



Note: Must Enable TaskWatchStop, because might cause of failure of SVP.

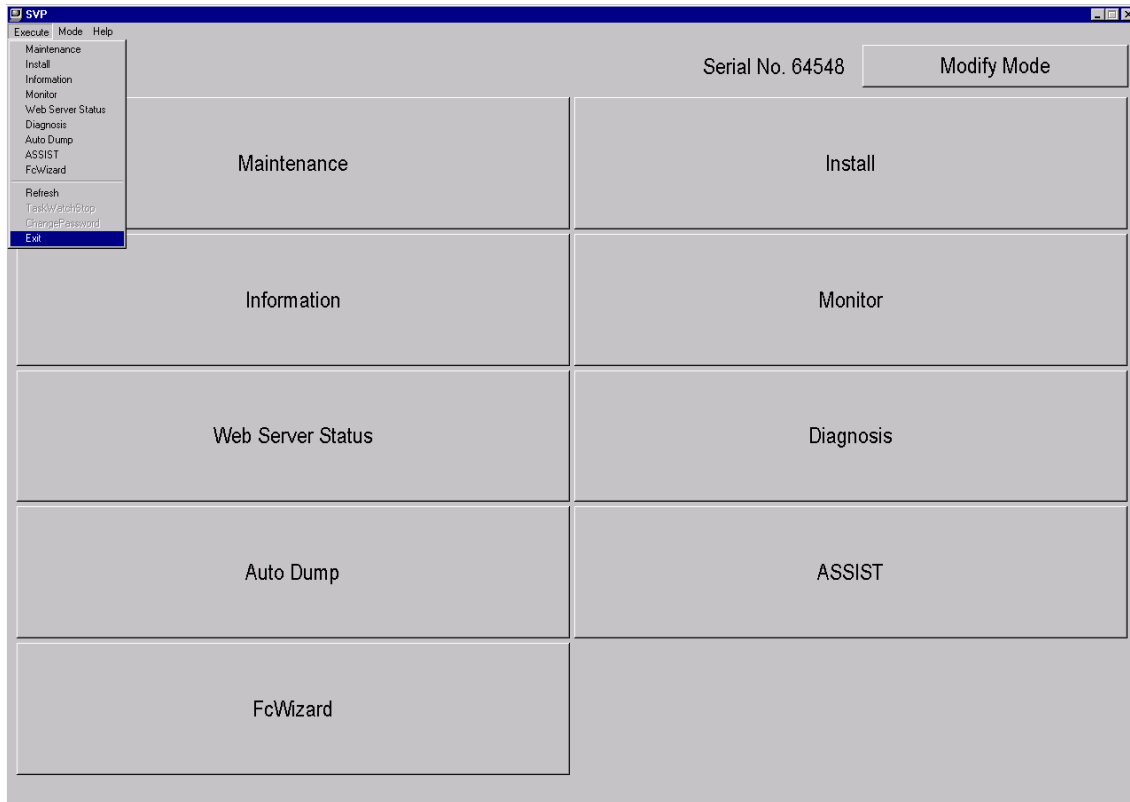
(6) Confirm TaskWatchStop

If following message box is displayed, select (CL) [Yes] button.



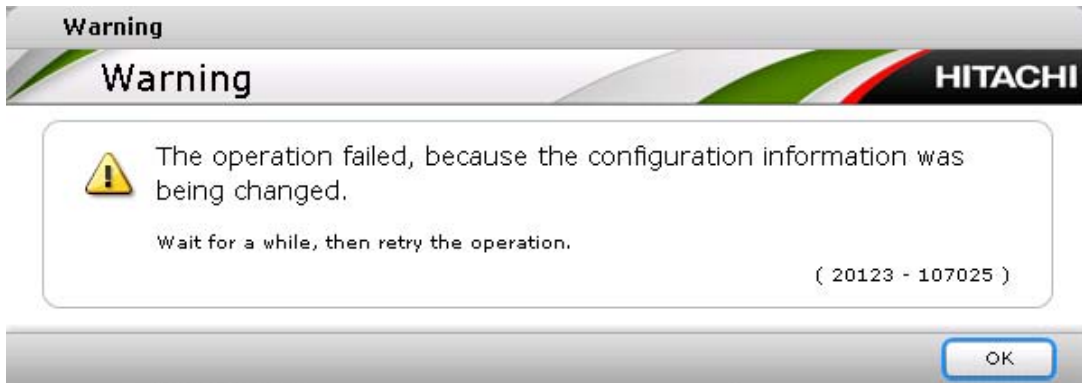
(7) Close SVP screen

Select (CL) [Modify Mode] button then change [View Mode]. And select (CL) [View Mode] button then change [Modify Mode]. Select (CL) [Execute]-[Exit] after confirm that [Execute]-[TaskWatchStop] cannot click.



Note: Don't forget close SVP screen. Must not forget close SVP screen. Might cause of uninstall failure of Java.

If following warning message is displayed on the Web Console, not select (CL) [OK] button. And follow the steps below.



Notice: It is all right when you press the [OK] button. And follow the steps below.

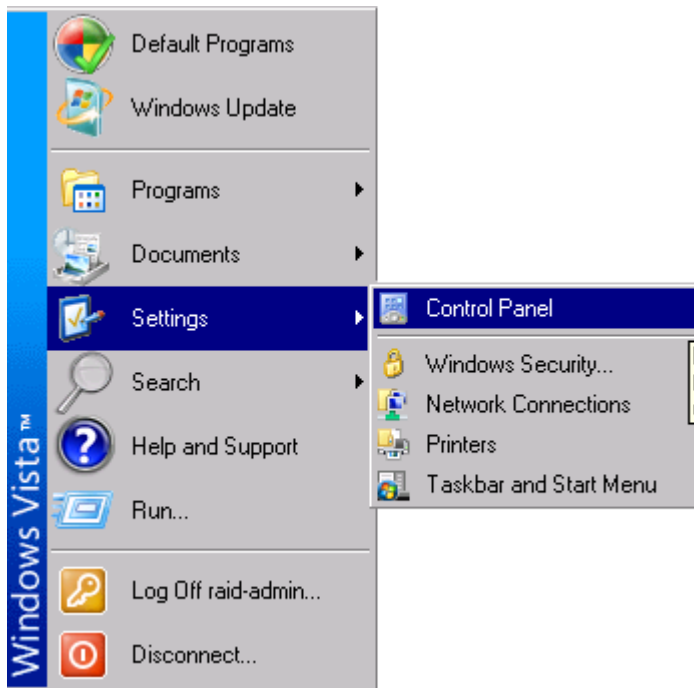
(8) Stop Tomcat Service

Stop Tomcat Service steps will be (9) ~ (14).

If OSS version 70-06-05/xx or later, go to step (15).

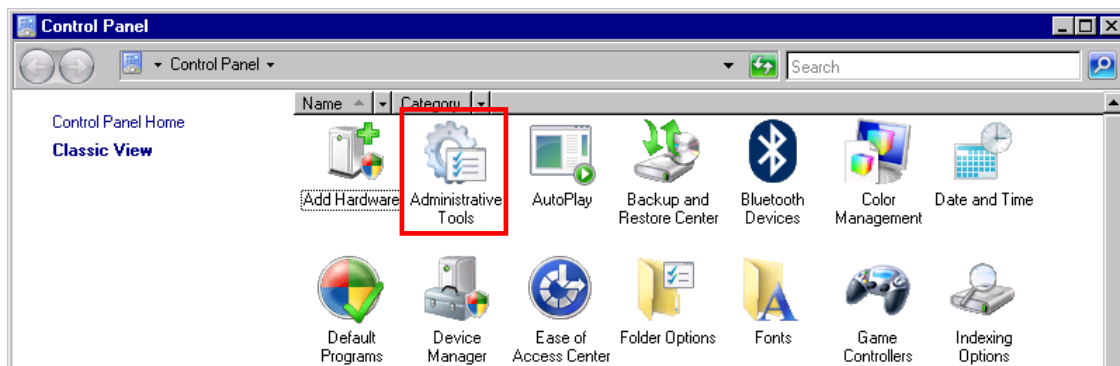
(9) Open Control Panel

Select (CL) [Start]-[Settings]-[Control Panel].



(10) Open Administrative Tools

Select (DC) "Administrative Tools".



(11) Open Services

Select (DC) “Services”.

Name	Date modified	Type	Size
Computer Management	1/21/2008 3:20 ...	Shortcut	2 KB
Data Sources (ODBC)	11/2/2006 3:29 ...	Shortcut	2 KB
Event Viewer	11/2/2006 3:29 ...	Shortcut	2 KB
Internet Information S...	3/7/2011 9:12 PM	Shortcut	2 KB
ISCSI Initiator	11/2/2006 3:29 ...	Shortcut	2 KB
Local Security Policy	1/21/2008 3:21 ...	Shortcut	2 KB
Memory Diagnostics ...	11/2/2006 3:26 ...	Shortcut	2 KB
Print Management	11/2/2006 3:31 ...	Shortcut	2 KB
Reliability and Perfor...	1/21/2008 3:20 ...	Shortcut	2 KB
Services	1/21/2008 3:20 ...	Shortcut	2 KB
System Configuration	11/2/2006 3:26 ...	Shortcut	2 KB
Task Scheduler	11/2/2006 3:29 ...	Shortcut	2 KB
Windows Firewall wit...	1/21/2008 3:21 ...	Shortcut	2 KB

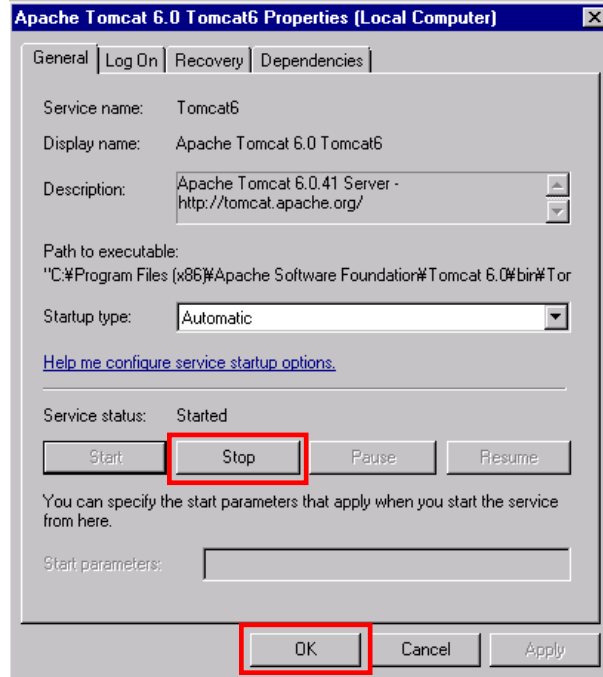
(12) Open Apache Tomcat 6.0 Tomcat6 Properties

Select (DC) “Apache Tomcat 6.0 Tomcat6”.

Services					
Services (Local)					
Apache Tomcat 6.0 Tomcat6					
Stop the service Restart the service					
Description: Apache Tomcat 6.0.41 Server - http://tomcat.apache.org/					
Name	Description	Status	Startup Type	Log On As	
Apache Tomcat 6.0 Tomcat6	Apache To...	Started	Automatic	Local Sys...	
Apache2.2	Apache/2.2...	Started	Automatic	Local Syst...	
Application Experience	Processes ...	Started	Automatic	Local Syst...	
Application Information	Facilitates t...	Started	Automatic	Local Syst...	
Application Layer Gateway S...	Provides su...		Manual	Local Serv...	
Application Management	Processes i...		Manual	Local Syst...	
Background Intelligent Transf...	Transfers fil...	Started	Automatic (D...	Local Syst...	

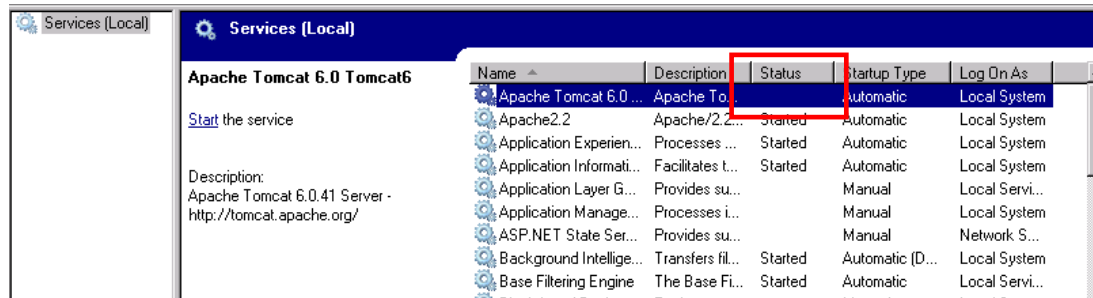
(13) Stop Service Apache Tomcat 6.0 Tomcat6

Select (CL) [Stop] button, Select (CL) [OK] button.



(14) Confirm Apache Tomcat 6.0 Tomcat6

Confirm that there is not the Apache Tomcat 6.0 Tomcat6 in "Status" list.

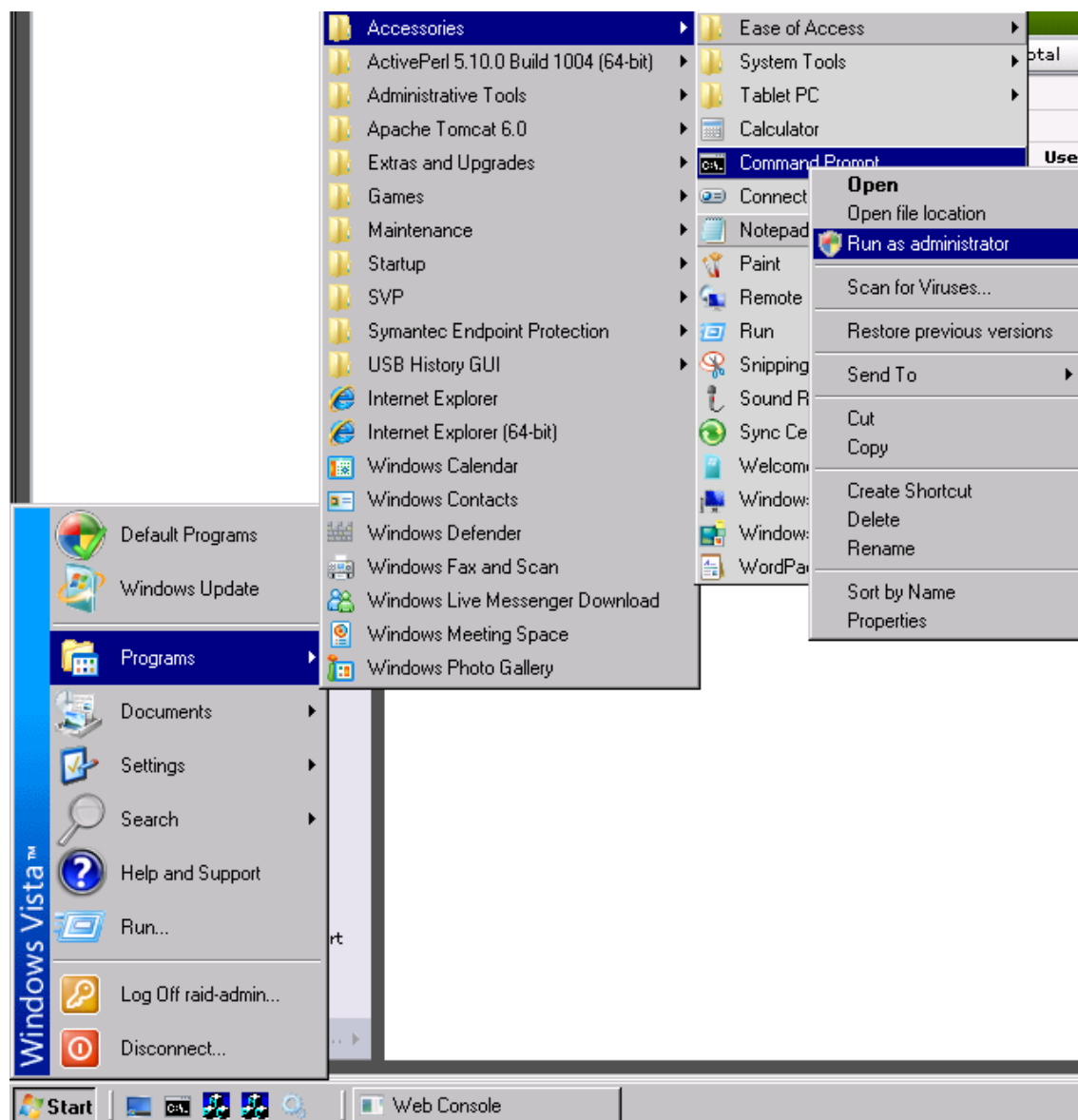


(15) Mount the OSS media

Insert the OSS media to the CD-ROM drive in the Console PC.

(16) Launch the Command Prompt as administrator

Select (CL) [Start]-[Programs]-[Accessories], and launch the Command Prompt with 'Run as administrator' in right-click menu.



(17) Launch the installation batch

Enter “\\tsclient\<drive letter>\JavaAp\JRE\JavaDownGrade_V1.6.0_12.bat” into the Command Prompt, and press the Enter key.

At the end of this process, the Command Prompt will close automatically.

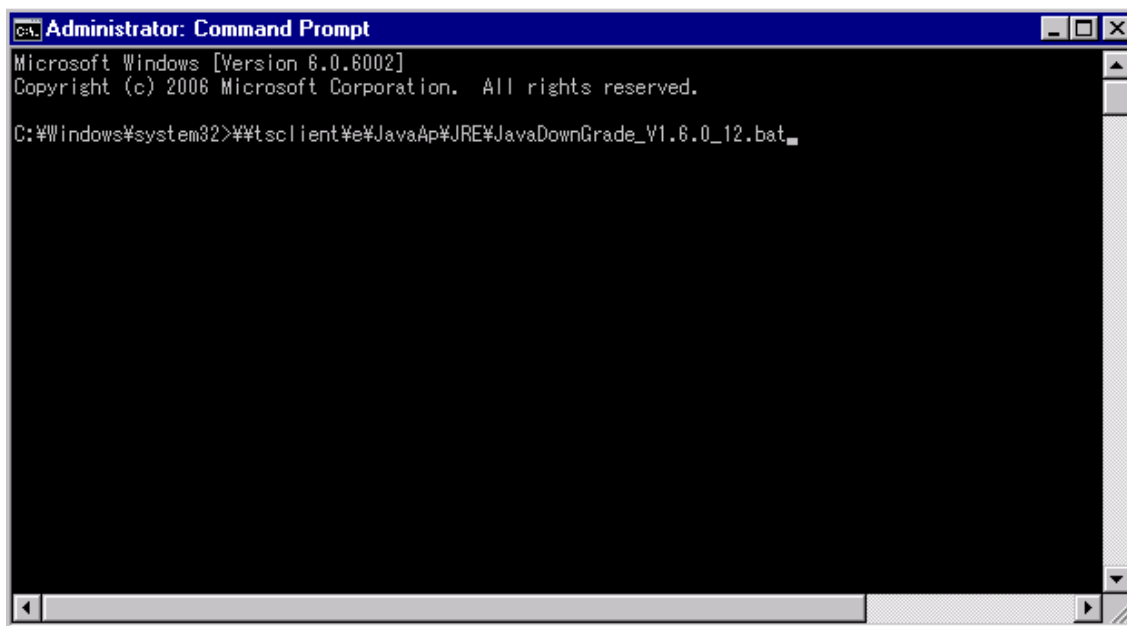
Note: •The input value is the form of

“\\tsclient\<drive letter>\JavaAp\JRE\JavaDownGrade_V1.6.0_12.bat”.

A drive letter is made the drive which inserted the OSS media.

The above is a case where the CD-ROM drive is assigned a drive letter E.

•When Command Prompt did not close automatically, select [×], close the window.

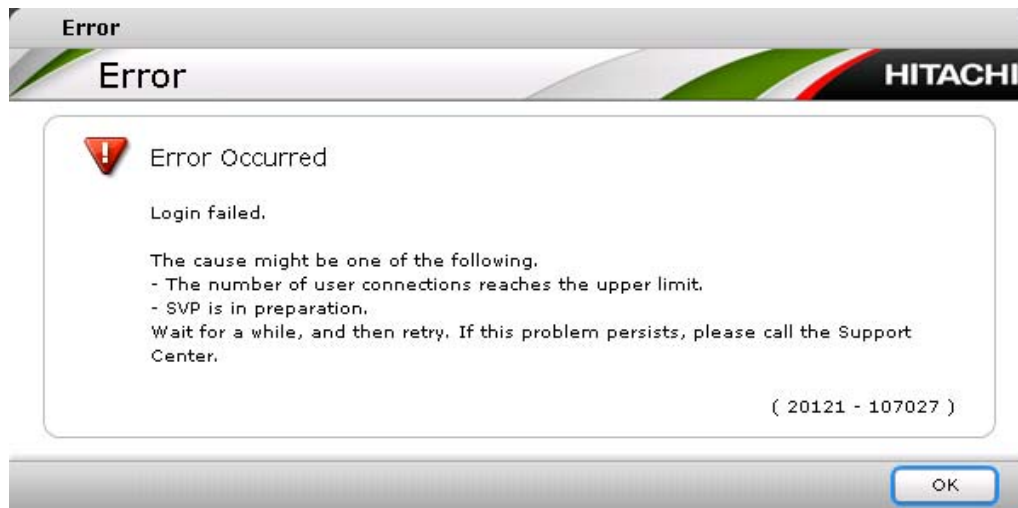


If following error message is displayed on the Web Console, not select (CL) [OK] button. And follow the steps below.



Notice: It is all right when you press the [OK] button. And follow the steps below.

After bat has finished, if following error message is displayed on the Web Console, not select (CL) [OK] button. And follow the steps below.



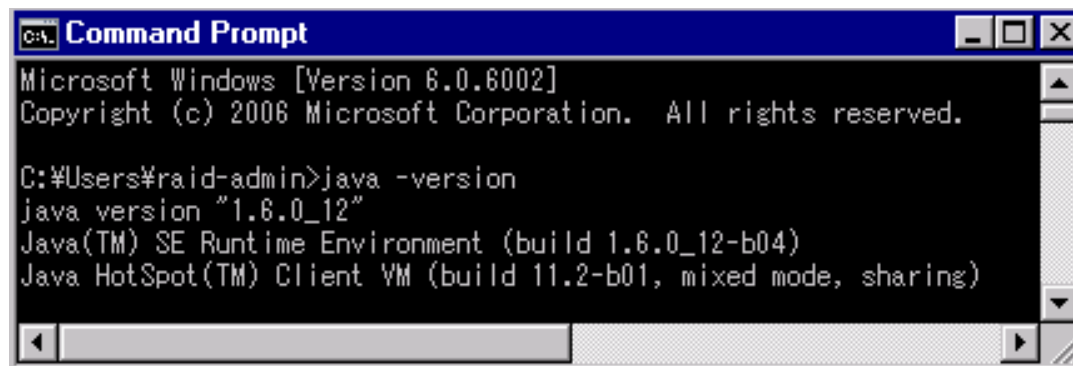
Notice: It is all right when you press the [OK] button. And follow the steps below.

(18) Open the [Command Prompt]

After bat has finished, select (CL) [Start]-[Programs]-[Accessories], and launch the Command Prompt.

(19) Confirm Java version

Enter “java -version” into the Command Prompt, and confirm Java version 1.6.0_12.



Notice: If Java version 1.6.0_45 is displayed in the Command Prompt, update is failed.

Select (CL) [JavaAp]-[JRE]-[setup] in OSS media, and launch [set.bat] with ‘Run as administrator’ in right-click menu.

At the end of this process, the Command Prompt will close automatically.

Follow the procedure of (20), and retry from step (1).

If Java version 1.6.0_45 is displayed in the Command Prompt again, refer to the Technical Support Division.

(20) Reboot SVP

Select (CL) [Start]-[Run...].

Enter “shutdown /r /t 0” into the Command Prompt, and select (CL) [OK] button.

6. Before using the Syslog/FTP transfer function of Audit Log

The setting of the Syslog/FTP server is required to use the Syslog/FTP transfer function of Audit Log. Ask the customer to set the address of the Syslog/FTP server.

Refer to “Hitachi Audit Log User Guide” (“Syslog window, Audit Log Transfer window”) for the details of the setting.

7. (Blank)

8. IPv6 Setting

When the IPv6 upgrade kit for the SVP (DKC710I-IPV6) is installed, you can use Web Console and Storage Navigator (Remote Web Console in case of HP version) with IPv6.

Internet Protocol Version used for the connection of Storage Navigator switches depending on the network setting of the PC which operates the SVP and Storage Navigator. A list of the setting of the PC which operates the SVP and Storage Navigator and Internet Protocol Version used for the connection is shown below.

Table 8-1 List of Internet Protocol Version used for the Connection

Client \ SVP			Network Setting					
			IPv4	IPv6	IPv4	IPv6	IPv4	IPv6
			Enabled	Enabled	Enabled	Disabled	Disabled	Enabled
Network Setting	IPv4	Enabled	Connected by IPv4		Connected by IPv4		Connected by IPv6	
	IPv6	Enabled						
	IPv4	Enabled	Connected by IPv4		Connected by IPv4		Connection disabled	
	IPv6	Disabled						
	IPv4	Disabled	Connection disabled (*1)		Connection disabled		Connected by IPv6	
	IPv6	Enabled						

IPv4: Internet Protocol Version 4 (TCP/IPv4)

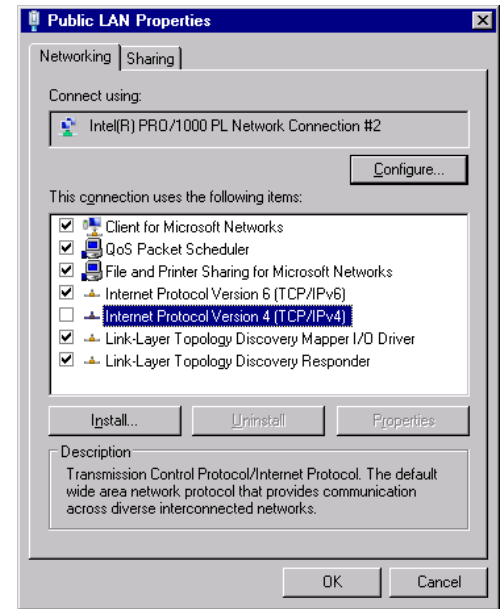
IPv6: Internet Protocol Version 6 (TCP/IPv6)

Client: PC which operates Storage Navigator (Remote Web Console in case of HP version)

- *1: If you make only IPv6 enabled for the setting of the PC which operates Storage Navigator while keeping both IPv6 and IPv4 enabled for the setting of the SVP, you cannot use Storage Navigator. When communicating only with IPv6, set both PCs which operate the SVP and Storage Navigator as IPv6.

(4) Set properties

When the property is displayed, uncheck the checkbox of “Internet Protocol Version 4 (TCP/IPv4)” in the list. Select (CL) [OK] and close the window.



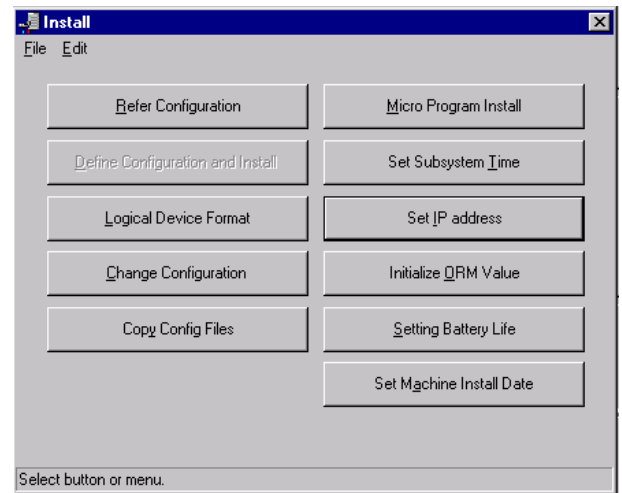
(5) Operate SVP window

Change to [Modify Mode].



(6) Open Install window

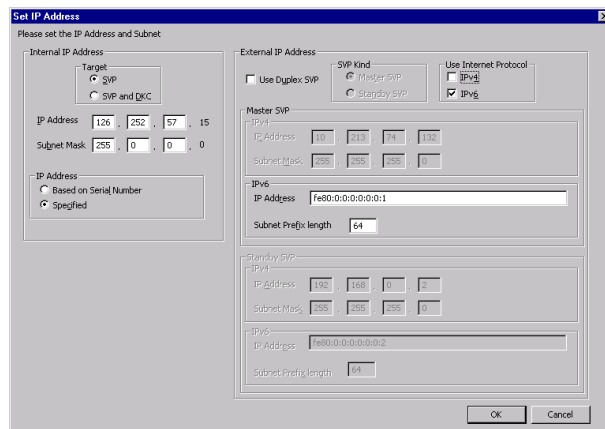
Select (CL) [Install] from [SVP].



(7) Set SVP properties

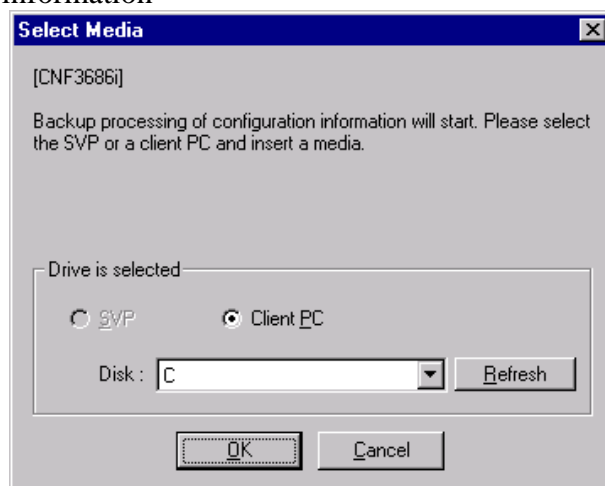
Select (CL) [Set IP address] from the ‘Install’ window.

Uncheck the checkbox of IPv4 of “Use Internet Protocol” and select (CL) [OK].



(8) Insert the medium containing the configuration information

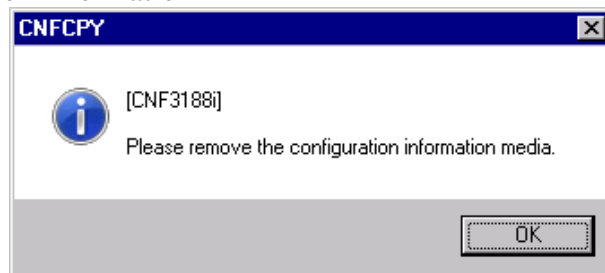
Insert the medium containing the configuration information in the specified location and select (CL) [OK].



(9) Take out the medium containing the configuration information

When the copying of the configuration information is completed, a message, “Please remove the configuration information media.” is displayed.

Take out the medium containing the configuration information and select (CL) [OK].



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(10) Make sure of the restart of the SVP

Select (CL) [OK].

The SVP is disconnected from the console PC.

After waiting for about five minutes, reconnect the SVP that has been replaced to the console PC.

